What’s on – be part of it!

These are difficult times for the UK construction industry, and along with all other industry organisations Buildoffsite needs to be able to demonstrate to Members and potential Members that we offer tangible business value that justifies our membership fee.

Rightly or wrongly, I have always believed that one of the things that distinguishes Buildoffsite from other construction industry organisations is the effort we make to deliver regular networking and knowledge transfer events for our Members. We deliver events because we believe that one of the most effective ways to introduce offsite and other innovative practices into this industry is by creating opportunities for those who support the need for radical change to meet with, share knowledge and do business with like-minded people.

The mix of people attending our events will be individuals from right across the client and supply side communities…individuals who in normal circumstances would probably not meet each other at all, or if they did meet it is likely to be in the context of a commercial project where relationships may well be different and less open. Even if the subject matter is not necessarily of immediate relevance, it is likely that before too long the knowledge gained and the contacts made will prove to be valuable.

Those who attend the visits will meet with senior decision takers from across the client community and from across the supply chain. Contacts will be made that
will inform future business developments. For those who are new to the practical use of offsite solutions, these visits can provide a great opportunity to develop new understanding and to identify the need for new skills and help highlight new business opportunities.

“Brock Carmichael has a number of key project deadlines and I was unsure whether I could really afford the time to join the recent Buildoffsite/Invest NI discovering offsite visit to Northern Ireland. With hindsight, I am glad that I did make the time to attend. It was a really useful trip in terms of knowledge sharing and provided me with an opportunity to meet incredibly enthusiastic construction industry people from across the Province. The manufacturing facilities I visited were very impressive. As an architect, the chance to meet the team responsible for the Titanic Building and find out how they worked together to deliver the project was also compelling. The Buildoffsite Discovering Offsite programme of visits provided me with an invaluable opportunity to discuss business opportunities with like-minded individuals who are also committed to developing innovations and fresh thinking that will help bring about a better and more sustainable industry.”

Breakfast briefings are a regular feature of the Buildoffsite Programme. We recognise that people are busy and it is often difficult to get away from the office for more than a couple of hours. These briefings start at 8.00am or 8.30am and will run for a maximum of two hours. We cover a wide range of subjects, and over the last month or so we have organised briefings on new forms of housing finance, design for manufacture and assembly, making the most of tax credits for research and development activities, Lean production, new forms of product certification, BIM and so on. The numbers attending these briefings are kept small to inform discussion and to add value to those participating.

We have also delivered several half-day workshop sessions on key subjects which support the use of offsite solutions, including the application of Lean production techniques to identify and eliminate those processes and activities that add cost, but little or no value. Given the need for suppliers to minimise their costs while delivering increased project value for clients, it should be a no-brainer for clients and suppliers to want to know more about a technique that other manufacturing sectors regard as a standard operating procedure. This programme has been well supported in part, we believe, because Buildoffsite events always feature contributions from a client with relevant project experience that they are willing to share.

Collaborating with recognised industry professional institutes is something that we actively support. We have already worked with and established a relationship with RIBA and we are currently working on a possible event at RIBA's offices later this year. Also, we are working on collaborative events with the ICE and RICS to help promote the offsite message.

Buildoffsite Member to Member events are a great way for the Members to meet up and get to know each other better. Although mainly business orientated, the format for these events will be flexible to give some variety. For example, they may take the form of one-to-one rapid networking if a lot of new members are participating, or may be more conventional with set piece presentations followed by a discussion. We are planning a Member to Member event for 19 September 2012 to focus on the practical implications arising out of the Government’s decision to require BIM for public sector construction procurement. This session will be well grounded and will examine in some detail what this game-changing decision means for suppliers and how it will advance the use of offsite construction solutions.
Perhaps less visible, but no less important, is the programme of high level business dinners that we host throughout the year to bring together senior industrialists, to discuss matters that affect the performance of the construction industry and the contribution that offsite solutions can make to help bring about a smarter, more productive and more sustainable industry. A recent business dinner engaged with the challenges that need to be addressed so that offsite solutions can deliver their full potential. A separate article is included in this Newsletter. Having the advice of industry “big hitters” who are prepared to act as critical friends is invaluable in helping Buildoffsite plan its work programme.

We have an increasing network of university associates and many overseas contacts who are interested in the use of offsite solutions and who regard the UK as the epicentre for best practice in the use of offsite methods.

Buildoffsite Members who wish to hear directly about the progress of our work programme, including the events and knowledge transfer activities, are welcome to attend our regular Direction Group meetings. These are great opportunities for business to business networking and a regular opportunity to hear about the progress being achieved across the overall programme.

Details of some of the recent and upcoming Buildoffsite activities are featured in this Newsletter and on our website at: www.buildoffsite.com

These and all the other things that are underway add up to a substantial programme that has been set up to support the case for offsite solutions and at the same time to provide great business to business opportunities for the Members. However, you have to be part of the Buildoffsite family if you want to take part in and benefit from the opportunities on offer. I do hope that on reading this you will be interested in finding out more about how Membership of Buildoffsite can help you to realise tangible business benefits. If you would like to arrange a conversation, then contact me on: info@buildoffsite.com or 020 7549 3306.

New members

London Underground (LU)

London Underground (LU) has been keeping London moving for almost 150 years. It serves 27 out of the 33 London local authorities and its network has over 402km of railway. During peak hours LU operates more than 530 trains on eleven different lines, while 422 escalators and 166 lifts move passengers in and out of 270 stations. In 2011–2012, LU carried record numbers of passengers, with over 1.17 billion journeys.

At the same time LU is currently undergoing one of the largest upgrade programmes in its history with about 30 per cent more capacity being added through the introduction of new trains and signalling systems and upgrades to track. The improvement programme is key to London’s future growth and to supporting its economic recovery, it also includes investment in some of its busiest stations.

During this upgrade programme LU has continued to deliver high levels of service performance for its customers with customer satisfaction scores sustained at their highest ever levels.

The safety of customers and staff remains LU’s top priority and the 2010–2011 Office of Rail Regulation report indicated that the Tube is the safest significant-sized railway in Europe, with a safety record 15 times better than the European average.

London Underground Vision is to provide a World Class tube for a World Class City.
News

Interserve named preferred bidder on Government’s first BIM project at HMYOI Cookham Wood, Rochester

Interserve, the international support services and construction group, has been selected as preferred bidder for the first adopter “pilot” Government project that has used Building Information Modelling (BIM) through the tender and will be fully employed at contract stage. The project, for clients the Ministry of Justice (MoJ), comprises a new three-storey houseblock, together with an education facility at HMYOI Cookham Wood, which is part of the Rochester cluster of prisons.

HMYOI Cookham Wood is the first pilot government project to use a project bank account, to ensure efficiency of payments through to the supply chain and SMEs.

The new houseblock comprises two legs each divided into three wings providing small prisoner communities of 30 prisoners per wing. The “hub” accommodates the control room, support and communal facilities as well as staff and circulation areas.

Adjacent to the houseblock will be a new two-storey regime building, which will house the prison’s main library, skills, education and workshops.

External works include three new fenced exercise yards, access roads and new security fencing. The facilities are being built on MoJ land adjoining the existing prison.

Managing Director of Interserve Building, Ian Renhard commented: “We are proud to be supporting the Ministry of Justice in leading the way on BIM, which reflects the importance of this Government initiative. This intelligent approach to delivery will bring many benefits for our clients not just during design and construction, but also into the long-term operation and management of these new facilities.”

Benefits of BIM include improved collaboration and design co-ordination, design efficiencies, reduced wastage in design, materials and on-site production, and greater benefits for asset management, custodial operation and on-going maintenance of the facilities. The MoJ are a leading construction client in implementing Lean delivery methods on all their projects. BIM is a key component for them, as they continue to identify and drive out waste, ensuring best value is achieved in their procured and delivered assets.

Offsite solutions and the Schools’ Building Programme

Introduction from Richard Ogden

A couple of weeks ago I was asked to pen a short article for the Building for Education publication (B4ED). I jumped at the chance, because it gave me an opportunity to return to a subject that I have been working away at for the past eight years. That article is reproduced below.

Throughout my career I have advocated creative thinking to unlock value, ramp up quality and reduce waste in construction to an absolute minimum. In terms of our school building programme, the opportunities to implement some significant element of standardisation in terms of the component parts that can go into school buildings has long seemed to be a “no brainer”. I am certainly not advocating that
all schools should look the same, but I am advocating that it makes no sense for every single component to be designed afresh for each new project. Standardisation is not a dirty word – but in my book, waste most certainly is.

Having worked with the Department for Education on the development of standard solutions, I thought that progress was only just around the corner. Having read the James Report I was sure that this was the case. I still remain convinced that it is only a matter of time before Government gives its support. In this article you will sense my frustration at the delay and the lack of direction and also disappointment that significant opportunities have already been missed. However, on a positive note, I can’t think of a time when the construction industry has been better prepared to launch its own solutions for school building that will deliver outstanding quality at a price the country can afford. We now need Government to play its part to enable that creative thinking to translate into projects that will embrace the standardisation of components to transform value.

Some eight years ago, with support from what is now the Government’s Department for Business, several industry representatives came together to set up the Buildoffsite organisation. Most construction industry organisations exist to promote the commercial interests of particular service or manufacturing interests. Buildoffsite was different and unique, in that it brought together suppliers, designers, contractors and clients to promote the message that offsite solutions offered tangible business and project benefits that could not be matched by traditional construction methods. The rationale was very simple: almost all other modern manufacturing industries had rapidly adopted the practice of assembling their products from a set of precision made components. For reasons that frankly make not a scrap of sense, construction had bucked this international trend, and by and large had stuck with the habit of manufacturing buildings on site from a set of standard basic materials and products.

The cost of construction was constantly increasing, levels of productivity were abysmal, and poor quality, reworking and incredible levels of waste of materials, labour and capital were the norm. This, according to many in the traditional industry, was without doubt the best way to deliver quality and client value. Please don’t think that I am joking – engage with any client and ask them. Not surprisingly, many of us thought that possibly – just possibly – UK construction could learn something from other industries.

Buildoffsite has worked hard over the last eight years to promote the tangible business and project benefits from using offsite solutions and without doubt in many sectors of the market the incorporation of offsite components is now taken for granted. Well, you don’t have to take my word for it…the next time you are near a construction site for a new build hotel, office development, retail unit or hospital just stop and see how the building is being constructed. The odds are that the process will involve the assembly of factory made components delivered on a just in time basis – no waste, right first time installation, rapid construction and right first time build quality. Keep watching and I assure you that over the next few years you will see even faster build times, an absence of skips and, yes, far fewer people being employed on site. This trend will be accelerated by the use of Building Information Modelling (BIM) into the design and construction phases. Also, I predict that by the wholesale adoption of Lean production techniques to spot and eliminate ways of working and practices that are at best inefficient, and at worse add not a scrap of value. Do not buy the claim that the use of offsite solutions inevitably gives rise to poor architecture.

It is with huge regret that one of the market sectors that has been substantially immune to the use of offsite solutions is the schools sector, although this has recently changed. I still find it hard to understand why this should be so. It is not as if school building in the UK has no track record in the use of offsite methods and standard details. I
confess that I am old enough to remember the building systems operated by the London County Councils — many of these schools are still with us after more than 70 years of excellent and adaptable service.

I also remember the CLASP system. Inconveniently for some, I recall that far too often buildings were allowed to decay, and essential maintenance and repair was overlooked on the basis that revenue spend could always be put off. I also remember the excellent work done within the Department for Education and Skills to develop a set of standards, specifications, layouts and dimensions for common school building components. This was inspired thinking on the part of the Department, but why was the opportunity to drive such a common sense approach not given more support?

I would take some convincing to accept that Government — whether central or local — is particularly well set up to function as a paragon construction client. There are some excellent exceptions to this generalisation. However, on the whole and with great regret, I have to say that in terms of achieving value for money for building projects, I would rather rely on the expertise and energy of the private sector, which generally does not need to be reminded of the opportunities for improving quality and value through re-engineering, standardisation, use of components and continuous improvement by capturing the learning points from a programme of construction projects.

The Building Schools for the Future Programme should have provided a once-in-a-generation opportunity for the public sector to grasp all the benefits of a massive and coherent investment in UK real estate to drive innovation and efficiency of production through a co-ordinated national programme. In reality, the opportunity has been squandered in an orgy of spending to create bespoke school buildings. Will any of these have the lifespan of an LCC school — well, what do you think? The James Report and the political nous of Michael Gove helped put this particular genie back in the bottle and we now wait to see what the Priority School Building Project will deliver.

Will it do any better...will our taxes be any better spent?

What we must not do is blame the construction industry for what has happened and indeed, for what has not happened. Government has allowed the creation of an almost unbelievable bureaucracy to be incorporated into the school building process. Design competitions, tendering, sample buildings... all activities that have to be paid for by the industry and the cost of which will inevitably be added on to the price of future work — not just school building, but across the entire construction economy. All this as part of the backdrop to the age of austerity when as a country we need to rapidly build an educational resource that will deliver young people with the skills to enable the UK to compete with the brightest of India and China.

I am going to close on a more positive note by drawing attention to some of the excellent work that has been led by construction industry businesses — mostly Buildoffsite Members — to provide cost-effective school building solutions and that commonly feature the incorporation of offsite solutions. In particular, I would mention the Sunesis system developed by Willmott Dixon, the ADAPT system developed by Wates and Capita Symonds, the “kit of parts” offering developed by Laing O’Rourke and Atkins, and the PodSolve system developed by Interserve. These, and other examples, are showing the way to a much more cost-effective and affordable school building programme. What is missing now is for Government to bring its own procurement processes into the 21st century.

Making offsite mainstream — addressing the challenges

At a recent business dinner held at Arup’s offices in London, a group of senior industry figures sat down to discuss the role of offsite construction solutions within a modern construction industry. Based on their hard won experience,
they identified the practical challenges that need to be overcome if offsite is to achieve its potential. Everyone agreed that offsite solutions have an increasing role to play, as performance requirements for buildings become more demanding, as the challenge of sustainability becomes more of an imperative and as the need to deliver substantial improvements in value is recognised across the industry. The offsite industry is growing rapidly, but at the same there is a priority need for the supply side to look to deliver substantial improvements in quality and value, and in the wider understanding of its offerings.

In particular, the discussion identified the following challenges:

- clients need to be educated and informed of the opportunities for offsite solutions in a way that addresses their business and project needs, and serves to “grab their attention”
- the offsite supply side needs to be able to demonstrate the “value” of their offerings compared to alternative solutions, and for this to be presented in ways that can be readily understood and recognised by clients and their advisers
- main contractors should be encouraged to be more receptive to the project opportunities provided by the use of offsite solutions because such solutions will be good for business and will reduce risk
- buy-in needs to be achieved from designers for offsite solutions to discourage early design decisions/detailed design that serve to frustrate the use of offsite solutions
- suppliers need to be able to demonstrate clear evidence that offsite solutions are delivering tangible project and organisational benefits. There is a need for the supply side and Buildoffsite to construct “harder edged” case studies that robustly illustrate the contribution made by adopting an offsite approach
- offsite suppliers need to improve their act in terms of product offerings, value and service
- the supply side needs to increase investment in manufacturing to reduce unit costs of offsite solutions
- it is important to influence cost consultants to be more receptive to the use of offsite solutions, to help them accurately compare offsite solutions with corresponding traditional alternative methods
- the supply side needs to be supportive and responsive to those clients and other champions who are prepared to try offsite, and who are willing to share their experiences
- there is a need to be mindful that public policy ambitions can create a set of challenges that will inevitably affect the offsite sector. For example, the role of traditional means of construction to create employment opportunities in local areas.

These challenges will be very useful in developing the Buildoffsite work programme and in informing the dialogue with the Buildoffsite Membership.

---

Buildoffsite visit to Northern Ireland

The Northern Ireland-based McAvoy Group, leaders in modular construction, helped host a two day fact finding visit to the Province by leading members of the Buildoffsite organisation. The visit, organised jointly by Buildoffsite and Invest Northern Ireland, included a tour of McAvoy’s Lisburn premises to showcase best practice in construction methods and to provide member companies with the chance to explore opportunities for potential collaboration and strategic business development.

Offsite construction is being viewed increasingly as the preferred option for delivering health, education, commercial and other buildings across the UK and
Ireland. This is because of the “right first time” quality available through the assembly on site of precision made factory components with much greater certainty of outturn cost and predictability of build programme.

Richard Ogden, Chairman of Buildoffsite said: “Northern Ireland has a significant manufacturing tradition and this heritage is reflected in the strength and expertise of local product and service suppliers. The local industry is very supportive of the increased role for offsite construction solutions in creating an innovative and competitive construction industry, delivering high quality buildings and structures in the UK and in export markets. I am certain those who have taken part in this visit will have gained much from the excellent and informed networking and from experiencing best practice first hand from Northern Ireland based organisations such as McAvoy, which has developed a considerable reputation for product excellence across the UK and Ireland.”

Orla Corr OBE, Business Development Director of McAvoy, said the Group was delighted to host the visit to their production facilities at Lisburn: “We believe there is a lot we can share as leaders in the offsite industry in terms of best practice and opportunities for collaboration. It gives us particular pleasure to welcome visitors to our HQ as part of our 40th anniversary year.”

As well as seeing first-hand the McAvoy production facilities at Lisburn, where they were joined by local business and political leaders, the group visited the recently opened Titanic Signature Project in Belfast.

Kevin McCann, Director of Advanced Engineering and Construction at Invest NI, said: “While the wider UK and European construction markets are struggling, the offsite industry offers considerable commercial opportunities. Promoting the region’s expertise and skills to these international players will help to raise the profile of Northern Ireland’s construction sector and build a platform for local companies to compete for new business in Great Britain and beyond.”

Innovative solutions to developing the most constrained hospital sites

Simon Ambler, Director of Yorkon, looks at how off-site construction is helping healthcare providers meet the increasing pressure on services by providing highly innovative solutions to delivering world class facilities on the most constrained hospital sites. Off-site construction continues to challenge conventional site-based building methods through innovation – and a series of recent projects demonstrate the value it can add to building procurement by addressing space planning issues in the health sector.
Why more NHS Trusts are choosing an off-site solution

Constrained hospital sites are a huge issue for healthcare providers, at a time when there is increased pressure on services to meet both Government targets and policy, and to address the needs of a growing and ageing population. And when you consider the critical need to minimise disruption to the provision of existing services and to reduce programme times to improve patient care and operational efficiency, it is easy to see why more NHS trusts are choosing an off-site solution to expand their facilities. With good design, highly efficient processes, a robust and flexible building system, and enlightened architects, contractors and healthcare providers, off-site construction can deliver comfortable and welcoming environments for patients and staff. Also, it offers complete long-term flexibility to meet changing local needs, full compliance with NHS best practice for building design – and on some of the UK’s most challenging and restricted building sites.

How to expand an already highly constrained hospital site

Modular buildings can be sited in completely enclosed courtyards, on raised platforms, and on the roofs of existing buildings. This means that areas of a hospital can now be expanded or developed that may not have access to the plant, materials and equipment required for conventional building methods. This is a key benefit for hospital sites where space for expansion is severely restricted. Traditionally-constructed buildings also can be extended using an off-site approach, both vertically and horizontally, giving healthcare providers even more flexibility to expand capacity requirements and optimise efficiency in the use of space. Disruption to patient care during construction on a busy hospital site can be a major concern during construction projects. However, by using an off-site solution, the manufacture and assembly of the building structure and envelope, and a high proportion of the fitting out are carried out off site, significantly reducing disruption to staff and patients. Construction work can be carried out without the need for decanting and the cranage operations can be timed for weekends, keeping any disturbance to a minimum.

Case study: A challenging roof-top expansion at Harrogate Hospital

Facilities were expanded at Harrogate District Hospital by craning in a new storey on to an existing ward building. The project was carried out by Yorkon with main contractor Interserve, as part of the rationalisation of office accommodation across the hospital. The new scheme was constructed on top of a traditionally-built two-storey building to create a centralised hub for administration, helping to address the constraints of the site. The use of an off-site approach minimised disruption to the hospital during the building project, significantly reduced the programme, and overcame the challenge of severely restricted access.
Case study: Creating a landmark hospital building on a restricted site in Colchester

Working with Kier Eastern, Yorkon provided a major scheme at Colchester General Hospital to increase the Trust’s capacity in time for the peak winter period. The building accommodates a new children’s department, an elective care centre and a surgical ward. The shape of the site demanded a complex modular layout, it was highly constrained, and there was only a short window for construction. The use of off-site construction allowed an existing ward to remain in use until just days before the final phase of modules arrived on site and reduced the programme time by around six months. Also, it helped the Trust provide additional capacity elsewhere in the hospital to deal with unexpected pressures.

How to select an off-site specialist – five key tips

1 As the demand for off-site construction continues to increase, so has the number of specialist contractors. But it is important to recognise that as in any other sector, not all off-site specialists are the same and the level of technical expertise and quality of the finished buildings can vary hugely between suppliers. It is critical in the selection of an off-site partner, that the healthcare provider compares solutions that are like for like.

2 Check the supplier’s resources and track record. In these challenging economic times, it is absolutely imperative that any contractor can demonstrate strong financial stability. Look at statistics for the number of projects delivered on time and on budget over the past five years. This is a good performance indicator and will help reduce the risk of budget overruns and delays. What services will be provided? How will the project be managed? Does the contractor have the required expertise and technical backup? This is particularly important if the site is constrained, which will bring its own challenges. Will the off-site specialist appoint a dedicated project manager?

3 Look at the manufacturer’s experience. The contractor should have specialist healthcare experience. Talk to other NHS trusts and contractors that have used the system and visit completed buildings. Always take up references.

4 Independent approvals and warranties. Look for and verify independent endorsements, approvals and warranties such as:
   - ISO 9001 (quality) certification should be in place for the whole process, not just selected elements
   - OHSAS 18001 for occupational health and safety management
   - ISO 14001 for reducing impact on the environment
   - acoustics
   - insurance
   - BBA certification
LABC approval
LPCB certification for fire resistance
a 30-year structural warranty for the load-bearing elements of the building and a five year product warranty to cover the external fabric should come as standard for all modular buildings

5 Assess the contractor’s approach to sustainability:
- can the contractor demonstrate ongoing reductions in waste and carbon emissions?
- what “green” design options are available for the system – such as rainwater harvesting, ground and air source heat pumps, and passive ventilation?
- what in-house capability does the manufacturer have to value engineer the building design for maximum energy efficiency and whole life value?
- how does the system perform without any adaptation in areas such as air permeability to meet Building Regulations Part L 2010? Look closely at the test results achieved for completed buildings.

Two great names join under one banner

Premier Interlink (Waco UK Ltd), a market leader in the supply of modular building solutions, recently purchased the intellectual property rights of Britspace, who ceased trading in 2011, including the design rights for Britspace products.

The combination of expertise from Britspace and Premier Interlink will ensure that Premier Interlink consolidates its position as a market leader, at the forefront of offsite construction solutions. With the employment of key individuals from Britspace, Premier Interlink has supplemented its dedicated existing team with further experience, and a wealth of management, design, manufacturing and project management skills.

Eugenio de Sa, Managing Director of Premier Interlink, stated that the synergies and benefits of combining two of the industry’s most innovative players would bring significant improvements in products.
and cost efficiencies: “We have already been successful in value engineering a number of our products, and making these both more efficient and cost effective. We have the full support of our holding company and have been allocated further funds in order to expand our operations, which include a high quality hire fleet.”

The Britspace products will complement the existing high quality Premier range of building products. This will allow Premier Interlink to extend their expertise to a wider range of market sectors such as education, healthcare, retail, custodial, construction, residential/living accommodation, defence/MoD, commercial, and hotels and leisure.

With these factors now in place, two great names are consolidated under one banner and Premier Interlink looks forward to developing its market leading position in the provision of modular building solutions in the UK.

Premier Interlink chooses Warrington as the location for its new style depot

After extensive market research it was decided that Warrington, with its excellent infrastructure, central location and good road network, would be the ideal site for one of Premier Interlink’s new style depots, and regional sales and administration centres. Premier Interlink (Waco UK Ltd), specialist manufacturers of steel framed buildings using off-site construction methods has announced the opening of their new 1.5 acre depot at Riverside, Bridge Lane, Woolston, Warrington which has created jobs for the area, with the potential for further employment in the future.

The Warrington site will provide extensive storage for its fleet of new and refurbished cabins and modular buildings, which are available for hire and sale, for use as office space and welfare facilities. The new depot will increase accessibility for both new customers and those existing clients in the region who already have hire contracts with the company.

The opening of the Woolston Depot is part of Premier Interlink’s growth agenda, with plans to open more regional depots over the next 18 to 24 months using the Warrington site as a model.

Premier Interlink (Waco UK Ltd) whose Head Offices and Manufacturing Plant is based at Brandesburton, East Yorkshire, officially opened the depot in June 2012, and the company is now looking forward to expanding their existing client base in the area and trading with both local businesses and transport companies.

For more information:
Tel: 0800 316 0888
Visit: www.waco.co.uk

Yorkon launches revolutionary new building system

Award-winning off-site specialist Yorkon has launched a new building system that is set to revolutionise modular construction in the UK. Yorkon now offers the widest range
of building modules currently available from any off-site manufacturer in the UK – giving architects, contractors and construction clients the unrivalled design flexibility to meet almost any building footprint. This revolutionary building system, which has thousands of configurations and permutations, will realise the full potential of off-site construction as a more efficient alternative to site-based building methods, but with absolutely no compromise on design, aesthetics or layout.

The Yorkon system has been launched following a three-year development and testing programme, which has included significant investment in new state-of-the-art production facilities in York – now the most advanced facility of its kind in Europe. The new building system incorporates a host of innovations including:

- columns that are no longer visible either internally or externally, for a seamless façade that can be specified with or without cladding
- the facility to fit any building footprint, including those designed for traditional site-based construction – reducing architects’ design time and resources
- module lengths from 6m to 18.75m that give even greater flexibility, and the option of using larger but fewer modules to reduce cranage, transport costs and site works
- two module width options of 3m and 3.75m; three height options for single-storey buildings, and seven different heights for ground and intermediate floors on multi-storey schemes to facilitate linking to existing traditionally-constructed buildings
- all connections between modules will now be carried out from inside the building – which is more efficient, quicker and safer on site
- the option of angled corners for further architectural variety
- a system built to engineering rather than construction tolerances for even greater accuracy and build quality
- a new wall construction which offers improved insulation and acoustic performance, and an even wider choice of window and fenestration options
- a new insulation production system to further improve quality and consistency
- a new 30-year structural warranty for even greater peace of mind.

Yorkon also offers the widest choice of cladding, glazing and roofing options to create outstanding architecture and landmark buildings – or bespoke facilities which complement existing schemes – with all the advantages of an off-site construction solution. These include:

- programme times reduced by up to 50 per cent
- 99.9 per cent recycling of waste material in the factory and 92 per cent recycling on site
- less disruption during construction
• improved thermal efficiency for lower running costs and reduced carbon emissions
• much greater assurance of delivery on time and on budget.

The new Yorkon off-site building system has many applications, ranging from teaching facilities for schools and academies, hospital buildings, health clinics and laboratories, to control centres and amenity buildings in the power and utilities sectors, supermarkets, retail kiosks and convenience stores, and passenger and operations facilities for railways and airports.

For further information:
Tel: 0845 2000 123
Email: contact@yorkon.co.uk
To download literature about the new system go to: www.yorkon.info/newsystem.

Case study: PodSolve, Leeds East Academy, Interserve Construction

Benefits
Cost: over 30 per cent reduction in school building costs. Cost per sq m: £1,470
Time: over 30 per cent reduction in school building time
Quality: high quality materials reduce noise and allow for enhanced “passive supervision”
Sustainability: well sealed, well insulated buildings incorporating combined heat and power plant, lighting control systems and photovoltaic panels. An adaptable solution. Relocatable for refurbishment or at end of life

Client: The E-ACT Leeds East Academy, South Parkway, Seacroft, Leeds LS14 6TY

The project
The E-ACT Leeds East Academy accommodation, a new school building in Leeds for 1,100 pupils, is set to provide a benchmark for future school building programmes. It is the first to be built using the new Interserve PodSolve concept, which offers a competitive build cost and reduced installation time, while providing high-quality teaching accommodation.

PodSolve comprises a series of steel-framed rooms or classrooms that can be easily fitted together to create a modern, fully-flexible school environment. It has been developed in a partnership between Interserve, Maber Architects, Norwood (the pod manufacturer) and Arup.

PodSolve can ensure that Britain’s children continue to benefit from improvements in the school learning environment. Crucially though it is a built environment that offers local authorities and academies a cost-effective option, regardless of the funding pressures they are under.

Main drivers and constraints
• government cuts of £1bn from the schools’ budget and the cancellation of £55bn Building Schools for the Future programme
• recommendations in the James Report Review of Education Capital that time and cost savings in new build projects were possible, and that new buildings should be “based on a clear set of standardised drawings and specifications that will incorporate the latest thinking on educational requirements and the bulk of regulatory needs”.

The solution
Interserve believes PodSolve is the answer to providing more for less, with the initial
project being constructed on behalf of the E-ACT operated Leeds East Academy.

- the original estimate for Leeds East Academy (1,100 pupil capacity) in June 2010 was £19m. Following the programme revisions, the budget was reduced to £14m. The PodSolve solution beats even this lower figure – it will cost just £13.65m

- the building is a state-of-the-art design and will be delivered in just 60 weeks – compared to traditional methods, which typically take up to 80 weeks to construct. The improved building and construction time should help schools make an extra inflationary cost saving

- the Pods are manufactured from composite panels within a rigid steel frame. These materials and toughened glass greatly reduce noise and allow for enhanced “passive supervision”, ensuring the built environment is as conducive to learning as possible

- the shape and layout of the school removes the traditional school corridor and regimented classroom approach. This is replaced with the creation of Pods that can be moved, added or removed in just five days per Pod to cater for changing school requirements

- the flexible building style allows for sections of the school to be separated from others. This opens up the possibility of allowing the local community to benefit from the facilities

- the Pods can fit in with more traditional construction – as is the case in the Leeds East Academy where the assembly hall, science laboratories and a gym form the north side of the building

- the PodSolve school is environmentally friendly, with photovoltaic panels, a well sealed, well insulated building, a combined heat and power plant, and lighting control systems.

Comment from the client

Helen Lane, Principal of Leeds East Academy, has been closely involved in the project: “we originally had £19m of BSF money that was reduced to £14m following the post education budget reviews. We looked at the options provided by refurbishment of the existing buildings and by building a traditional school, and clearly the most intelligent way to go forward was to use the new concept building, which offered us so many opportunities that the other two options didn’t. I’ve been able to work closely with the architects to plan the building round our new curriculum and we’ve been able to build a great school environment, with a very tight budget, in a very short space of time.”

The project is set for completion in March 2013 and installation of the Pods will start in October later this year.

Contact

David Large
Interserve Construction, 395 George Road, Birmingham, B23 7RZ
Email: podsolve.construction@interserve.com
Tel: 0121 344 4888
Website: www.interserve.com
Events

British Gypsum Discovering Offsite Tour

Date: Thursday 4 October 2012
Time: 10.00 to 14.45
Venue: British Gypsum, East Leake, Loughborough, Leicestershire LE12 6HX
Host: Andy Higson

Description of the Tour

Tour around the drywall academy, Technical Advice Centre, Saint Gobain Habitat Exhibition.

The Tour Programme

10.00–10.30 Arrival, refreshments, meet and greet
10.30–10.45 Introduction by Buildoffsite
10.45–11.30 Presentation by British Gypsum:
  ● overview of Saint Gobain and where British Gypsum sit within it
  ● brief history of British Gypsum
  ● overview of our service offering (value proposition) to OSM
  ● innovation section (latest solution developments)
  ● case studies with OSM
  ● corporate and social responsibility (CSR)
  ● plasterboard recycling.
11.30–13.00 Tour of the Technical Advice Centre (in groups)
  tour of the Saint Gobain HABITAT area (in groups)
  practical product demo session showing latest innovations in application (in groups)
13.00–14.00 Lunch
14.00–14.30 Q&A session
14.30–14.45 Round up and close
14.45pm Depart

Delegate places are strictly limited and applications will be treated on a first come, first served basis.

Attendance is free for Members of Buildoffsite. For non-members a nominal charge of £100 +VAT is applicable to cover administration costs.

For more information about the programme or about the announced visits, please contact Anna Whiting, Buildoffsite on:
Tel: 020 7549 3306
Email: anna.whiting@buildoffsite.com

Dates for your diary

Breakfast Briefing: Business Information Modelling (BIM)
Date: Tuesday 16 October 2012
Venue: Classic House, London

Discovering Offsite tour: Victoria Station project
Date: Wednesday 24 October 2012
Venue: Victoria Station, London

Discovering Offsite tour: Tata Steel, SBEC
Date: Wednesday 31 October 2012
Venue: Tata Steel, SBEC, Flintshire

Lean Project Management Workshop
Dates: Thursday 8 November 2012 (London), Wednesday 14 November 2012 (Manchester)
Venues: Aldgate House, London, and ISG Regions Ltd, Manchester

Breakfast Briefing: Maximising R&D tax relief
Date: Thursday 15 November 2012
Venue: Classic House, London

Discovering Offsite tour: BAA, Heathrow
Date: Wednesday 21 November 2012
Venue: Heathrow