



Richard Ogden - Chairman

Waste Not.....

I was intrigued to hear the media and press reaction to the recent House of Lords Science and Industry Committee Report on waste reduction. Much attention was given to the challenge that Government should switch attention from consumer waste in favour of industry and manufacturing waste which ensured the predictable riposte from DEFRA. Needless to say the Report drew attention to the huge quantities of demolition and construction waste arising from construction activity. There was also a substantial body of views from experts on the role of fiscal measures and other "signals" which were said to be encouraging industry to reduce waste and or to increase rates of recycling and recovery.

There was hardly anything new in this short-lived story but what it brought home to me was what I believe to be the still prevailing view that any discussion about waste in the construction industry is almost inevitably a discussion about material waste. This narrowness of scope is something that I believe gives false comfort to our industry and our clients and to some considerable extent serves to deflect the business case for process innovation. You will not be surprised to hear that I also believe that a proper understanding of waste in all its forms would further underpin the case for construction to progressively evolve into the on-site assembly of off-site manufactured elements.

Let me set out how I see things. Firstly I think we need to recognise that if Government wants to tax our industry it will do so. However, it is probably also true to say that any tax simply becomes absorbed into the overall cost of construction which at the end of the day falls back on to the construction client as part of the total cost of projects and, in turn, is passed on to the building owner, occupier and ultimately works its way through as an increase in the costs of goods, services and

taxes. Unless the client is so minded as to require construction practices to change as a specific response it seems to me to be hugely unlikely that those responsible for generating material waste will discover any incentive to change their ways of working as a consequence of landfill tax or any other "pass through" measure. It goes without saying that the largest single contributor of what I shall describe as environmental taxation is the Government itself – which is of course the industry's largest client and tenant. As an aside I wonder if the Government through its procurement decisions is itself recognising and reacting to its own signals?

But moving on - let me stress that I am not suggesting that it is impossible to reduce the material waste. Of course it is – although for tunnelling and certain other civil engineering processes it might stretch the imagination to find an alternative methodology.

The material waste that causes me particular pain includes waste of raw materials and waste from reworking. Our industry has traditionally over-ordered product on the time honoured basis that materials will either be spoiled on site, that what is euphemistically called "shrinkage" will take place, or that it is simply difficult to be precise about the quantities required and therefore it is simplest and most convenient to order a bit more. The experts who measure this source of waste on site talk in terms of 20% of all material being delivered to a site being removed as waste. After almost 40 years in the industry I still find this aspect of our industry truly shocking. I can think of no other industry where such an appalling performance would not just be tolerated but would also happen with many clients and funders being totally oblivious as to how much of their capital is being wasted.

Waste in the form of condemned work is also commonplace – take a look in any skip on any building site if you don't believe me. Where such waste arises it represents not just a loss of material but also a total waste of labour, of management time, of capital and of opportunity. It is, of course, the clearest possible sign that the processes that have enabled this waste to arise are ineffective.

We rarely talk about these other forms of waste – we should - but as I said at the top of this piece the focus tends to be on material waste ie we focus on the symptoms but collectively we are still too slow or too reluctant to focus on the cause. Perhaps our reluctance is because to do so inevitably calls into question the validity of traditional construction processes and the leadership and skills

needed to achieve a step-change in approach.

You may be thinking that in many ways construction is no different from other industries (both service and manufacturing) – all of which create waste in their processes. You may well be right but let me suggest that construction is perhaps unique both with regard to the scale of waste being generated but also because the hard reality is that across much of industry we simply do not learn from our mistakes. The same mistakes that are made today on our design offices and construction sites will be made tomorrow and so on. Too many clients and constructors are still prepared to accept the status quo in the belief that this is simply how our industry operates. We do not seem to get the message that left to its own devices an industry based substantially on site based construction is going to find it massively difficult to transform into a modern manufacturing sector. I can think of no other industry that has managed to make this transformation and I see no reason why construction should be able to achieve a better outcome.

As an aside let me just mention that I recently had the opportunity to lead a team from Buildoffsite to visit the Honda Factory at Swindon. This is a UK success story producing cars that compete in challenging markets across the world. Honda UK is required to compete with other Honda manufacturing facilities for new investment. If they are not competitive the investment to keep them in business will simply not come through. Perhaps the most compelling fact that I took away with me was that unlike the construction industry where there is an incredible degree of complacency about the level and causes of waste and the cost that this adds to the overall project cost etc within the Honda plant not only is there little if any waste but if a problem arises that would lead to waste it is sorted out straight away and the production processes are revised to avoid any repetition. Far from being prepared to tolerate waste the Honda managers seeking fresh investment are constantly seeking to improve production methods to take a few pence off the cost of manufacturing – and I do mean just a few pence. Our industry has a long way to go and a lot to learn.....

When I was a construction client I took waste in all its forms very personally. I was quite clear what waste represented.....it represented my hard negotiated investment money being used to deliver absolutely nothing of any value to my business. I wasn't being asked if I was content with this arrangement – it was simply the way things were. The rest so they say is history and I am absolutely delighted that more

and more clients and constructors are discovering for themselves that through a focus on-site assembly of off-site construction components it is quite possible to deliver construction projects with little, if any, waste of materials, labour or any other inputs. Yes of course this means taking a fresh approach to design and construction processes. This is how you achieve change. It certainly does not mean any restriction on the ability of architects to design inspirational structures but it does require a preparedness to recognise that it is not essential for architects to design every single building element from raw materials. Dare I suggest that there lies another source of waste

Buildoffsite is delighted to announce that Andrew Wolstenholme, Capital Projects Director, BAA has agreed to chair the Buildoffsite Client Advisory Group.



A report on the recent meeting of the Client Advisory Group is included on pages 5 and 6.

New members



Laidlaw Solutions Limited,
Strawberry Lane, Willenhall,
West Midlands WV13 3RS.
Tel. 01902 600400
www.laidlaw.net

Laidlaw is the leading specifier, distributor and technical service provider of Architectural Hardware, Doorsets and Handrail & Balustrading solutions to the UK construction industry. In addition to the renowned Orbis brand, the Laidlaw range also incorporates specialist product areas such as electronic access control and anti-ligature fittings.

Saving up to 75% on installation time and eliminating co-ordinating problems between doors and ironmongery, Laidlaw has pioneered the Doorsets Solution which is supplied complete with the door, frame, architraves and factory fitted ironmongery to minimise on-site work and maximise efficiency, quality and reliability.

Using a modular system in either stainless steel, nylon, timber or a combination of these, Laidlaw's Handrail and Balustrading Solutions are designed to satisfy each client's specifications. Offering the complete technical service, highly trained staff are involved at every stage of each project, from site surveys and design through to supply and installation.

Laidlaw offers a unique service with a national UK network of 12 sales offices and trade counters, each staffed by GAI trained consultants. Each Laidlaw sales office is then supported by a centralised distribution centre at Willenhall which has the capacity to pack and despatch individual items or by doorset. Through design, manufacture, supply and after-sales service, our commitment is absolute and is supported by our quality management system to BS EN ISO 9001.

Laidlaw has also recently opened Laidlaw Gulf LLC in the Dubai Investment Park near to Jebel Ali Port and the new Dubai World Central Airport development. This represents an exciting opportunity to capitalise on the growth in the UAE and will help to ensure the future growth of Laidlaw and its' people.

"At Laidlaw we pride ourselves in knowing our marketplace. Our unrivalled expertise coupled with product development and continual innovation across all aspects of our business enables us to respond to the changing needs of our customers. With a client list which includes Sainsbury, Tesco, Asda, Halifax, Portakabin and Virgin, those needs can be very demanding."

John Jefferies (Managing Director)



From luxury office suites to modular prison blocks and from high-quality retail units to emergency refugee accommodation, De Boer has shown that its semi-permanent accommodation offers a fast and highly effective building solution.

De Boer's in-house team of project managers, drawing on support from their colleagues across Europe, deliver complex projects on time and on budget. These projects include the supply of temporary structures, relocatable buildings and emergency accommodation with turn-key delivery of ancillary services such as internal fit-out, specialist floorings, air conditioning, heating, lighting and electrical services.

Having operated in the events and exhibitions market for more than 80 years, De Boer has experienced impressive growth recently in the commercial sector, where its assignments have included the supply of temporary warehousing, food-production units, staff restaurants, custodial units and airport facilities such as baggage-handling halls, public seating areas and aircraft hangars.

The company's experience and expertise has been equally effective for clients requiring replacement facilities during scheduled refurbishment works and for organisations needing to safeguard their business following fire, flood or other natural or man-made disaster.

The modular nature of the company's products – and the speed at which it can respond to an emergency – means De Boer has been called on to help the international relief efforts in the wake of the Asian Tsunami, Hurricane Katrina and the July 7 bombings on London.



The company's product portfolio extends to more than 70 different types of structure, with total stock totalling approximately half-a-million square metres of accommodation.

Its achievements in the commercial sector have followed high-profile successes in the events and exhibitions markets, where the balance between cost, quality and delivering on time is fundamental. These time-sensitive projects have included the Olympic Games, the Chelsea Flower Show, Football World Cup and the Farnborough International Airshow, for which De Boer creates Europe's largest temporary exhibition venue.



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Innovaré Systems has grown steadily since its incorporation by The Osborne Group in July 2004. Originally a supply chain integrator buying Structural Insulated Panels (SIPs) and other timber components from third party suppliers and co-ordinating the delivery to site for erection by our carpentry teams, by 2008 the business had reached a point where further development was required.

January 2008 marked the creation of our wholly owned subsidiary, I-S Manufacturing, who now manufacture and supply of all of our timber components. Based at Earlplace Business Park, Coventry, I-S Manufacturing occupy 33,000 sq ft of factory which contains a bespoke laminating line (the most advanced of it's type in the UK) complete with CNC cutting equipment that is linked via computer programme to the original design work carried out by the Innovaré design team. At it's peak I-S Manufacturing will employ 10 people on the factory floor, geared for a maximum annual capacity in a single production shift of over 120,000 square metres of i-SIP panel.



I-S Manufacturing assemble the jumbo sized SIP panels (external walls and party wall) under the i-SIP by Innovare brand name. They also assemble Wolf web beam floor cassettes with Weyroc Protect decking, roof panels, internal load bearing partitions and internal non-load bearing partitions. They will continue to outsource truss rafters and certain types of roof panels, as required.

External wall i-SIP panels will be offered in five standard thicknesses with two different types of Expanded Polystyrene (EPS) cores to provide a range of thermal performances, all of which contribute to high standards of airtightness required by the Code for Sustainable Homes. The party walls will also be available in two types of EPS cores in one thickness. For more information please go to www.innovaresystems.co.uk

We have completed a programme of rigorous product testing at the Building Research Establishment, the results of which have been used in the obtaining our own BBA approval.

We also have a significant product development programme to enhance the overall product, adding more components assembled in the factory, thus providing a more comprehensive offsite solution.

Our marketing activity is also underway to communicate Innovaré's unique positioning as a single chain of custody for the design, engineer, manufacture, supply and erection of a panelised building system.

The significant investment in the I-S Manufacturing facility, alongside our experience of designing, engineering and constructing SIP building systems ensures that Innovaré is best placed to serve the growing market for affordable housing and provide innovative and sustainable building methods for the construction industry.



Andrew Orriss

BAA announces its supply chain to be accredited by the Buildoffsite Registration Scheme



At the supplier evaluation process (SEP) workshop which included all first tier suppliers associated with its capital programme, BAA announced that all organisations involved in the provision of offsite construction activities would be required to become accredited under the Lloyd's Register EMEA

operated Buildoffsite Registration Scheme. This is a mandatory requirement which first tier suppliers will be required to implement with appropriate members of their supply chain.

About the scheme

The Buildoffsite Registration Scheme is a process based scheme which focuses on the safe, competent and compliant provision of the following accredited scopes of work:

- Design
- Manufacture
- Construction
- Project management

Risk based assessment

The assessment process does not duplicate or overlap with any certification schemes currently in operation within the offsite sector as it differs principally through its focus on risk. The scheme requires the offsite provider to establish a process which identifies risks to his business, to his projects, contracts and to the activities that contribute to the delivery of the accredited scopes of work.

This integrated and comprehensive process will also include the identification of control measures to mitigate, where appropriate, the identified risks and an effective system for communicating and implementing those control measures.

Scheme benefits

Accreditation under the scheme demonstrates the achievement by the offsite provider of good practice and charts a route towards best practice and therefore represents a powerful marketing tool with both national and international recognition.

Scheme status

The BAA announcement has resulted in a significant increase in the applications for the scheme which was launched in October 2007, and it is anticipated that up to 10 offsite providers will be accredited / under assessment by the end of the year.

For more information on the Buildoffsite Registration Scheme, please contact Terry Mundy on +44 7712 787851 or terry.mundy@lr.org. Alternatively, further information can be obtained from the Lloyd's Register EMEA website www.lloydsregister.co.uk

Meeting of Client Advisory Group – 24 July

The latest meeting of Buildoffsite's Client Advisory Group took place on 24 July. Once again the event as hosted by Arup. Our special guest was Andrew Wolstenholme, Capital Projects Director, BAA.

Arup Host



Matt Cooper

The meetings of the Advisory Group provide an invaluable mechanism through which Buildoffsite can regularly brief serial clients on its work programme to advance best practices and value within the construction sector through the application and further development of quality off-site solutions. In turn the Advisory Group also provides an opportunity for clients to share their thoughts and assessments on significant developments taking place within the sector which impact on the opportunities for the increased use of off-site solutions. The Client Advisory Group includes both public and private sector clients and provides a forum for clients to identify opportunities to collaborate on the development of new construction solutions which are needed to improve value but which are not being made available from suppliers.

The July meeting was attended by representatives from: BAA; Arup; N G Bailey; Terrapin; Honda; Land Securities; Circle; ODA; Metropolitan Police; GSK and from the Buildoffsite Organisation.

The wide ranging discussion covered a number of issues including:

- Support for the rapid increase in the range of off-site solutions coming onto the market. Also a recognition that some sectors would be faster to adopt the new practices than others. There was a need to maintain momentum through a sustained programme of education, case studies and also product evolution by suppliers to add value through increasing the functionality of offerings for example flooring products that also incorporated M&E services and service modules that delivered structural benefits.
- Many architects still believed that off-site solutions would inevitably inhibit design flair. Serial clients understood that to a large extent this was a comfort blanket for those designers who did not have a full grasp of how to design utilising off-site solutions. There was however, clear evidence that perceptions and practices were starting to change just as they had changed in every other modern manufacturing sector. Clients had a job of work to do to ensure that their need for better quality

buildings delivered by a more productive industry increasingly moving to the on site assembly of off-site manufactured components were not frustrated by out of date thinking. Buildoffsite and others would need to work closely with Schools of Architecture and also to support CPD.

- Achieving design and construction solutions that allowed for future adaptability was critically important in ensuring that buildings were capable of evolving to deliver functionality and value over time. This element of sustainable development was often overlooked in the drive for low and zero carbon construction. The use of off-site modules and components offered considerable benefits in terms of maintaining service life over time.
- Government had an important role in ensuring that opportunities existed to support increased standardisation in construction methodologies in major public spending programmes including in particular the delivery of new schools and health service buildings. However, the investment programmes were substantially fragmented with decision taking on the detail of building design and construction being delegated down to local level. A massive opportunity to harness the power of strategic spending to deliver quality, a step change in value for money solutions and the energising of the supply side to innovate in anticipation of a more rational market place was being lost.
- Although it was widely recognised that to secure best value from off-site solutions it was essential to draw the specialist suppliers into the decision taking process as early as possible a considerable number of clients and contractors were still reluctant to engage with potential suppliers until the design and construction methodology had been determined. A change in procurement process was essential to accompany the implementation of modern off-site enabled construction methods.

BAA and GSK are collaborating on a number of potential standardised construction solutions. A progress report on the development of a Generic Floor Cassette system was given at the meeting. A note on this collaborative development is included in this article.

The next meeting of the Client Advisory Group takes place on 22 October 2008. Attendance is by invitation only

Sharing Knowledge.....doing business in the Middle East



We all know that the Members of Buildoffsites represent a tremendous source of knowledge and experience not just on matters connected with the effective exploitation of off-site solutions but also on many other business and operational topics. Getting access to this knowledge happens in the course of one to one business meetings or during Member to Member event but until now providing a dedicated Buildoffsites structure within which particular business or special interest topics can be explored has been missing.

On 2 October we hosted the first Special Interest Session which focused on Doing Business in the Middle East. The speaker was Stuart Hylton, Sales Director of Apex Wiring. The discussion took place under Chatham House Rule and it was understood that the event involved the sharing of direct personal experience – detailed knowledge of the region and culture was not being claimed. Attendance at special interest events is restricted to the Membership of Buildoffsites.



Stuart Hylton

Brief Introduction to Apex Wiring:

- Originally a cable supply business which moved into modular (plug and play) electrical installations just 5 years ago
- Based in Durham but with an additional component manufacturing facility in Bulgaria
- From a standing start turnover in 2007 was £19 million, in 2008 will be £30 million.
- Anticipated value of sales into the Middle East in 2009 - £12 million
- Apex aims to make modular wiring the electrical installation of choice for new build

- Main measured benefits include 70% faster on site with 50 – 60% reduction in manpower. Cost neutral based on current economics.
- Main focus on commercial and residential developments with major success in the Healthcare and Education sectors.
- Customers are main contractors and service engineering contractors
- Main objectors – Those M&E consultants who see no personal advantage for them in changing to modular wiring.

Just over a year ago Stuart Hylton attended the BEX event at Valencia to take part in a Buildoffsites business to business session and to network. As a consequence he was approached by the Aldar Organisation who are the designated national developer in Abu Dhabi and also operate in a number of other Gulf States. Aldar's current committed spend is in the order of £70 billion. Aldar and some of their trading partners were keen to introduce modern methods of construction into their developments as a result of the size and scale of the projects. The modular wiring aspect was just one of the opportunities and as a result Apex have now firmly established trading partnerships in Abu Dhabi and are anticipating substantial growth in sales over the next few years. Opportunities to "open for business" in Qatar are now being considered.

Learning Points

- The Abu Dhabi market is huge. Resources are not unlimited and there is competition from other Gulf States for labour and investment. Delivering the build programme as quickly as possible is a national priority. This is very conducive for a positive reception for innovative methods that deliver quality, eliminate risk and are also commercially attractive.
- Recognition that the local business culture is different and can not be circumvented. Having the right contacts is everything.
- Technical Regulations are not a problem. British Standards/IEE Regulations are generally recognised .
- Essential to work with local partners. Working alone would not be viable. Apex have developed strong links with 2 major construction companies as well as having a distribution agreement with a local electrical wholesale business which now represents Apex's interests.
- The need to have a local "sales manager" to undertake relationship building rather than sales. Now in place.
- Generally M&E consultants in Abu Dhabi seem to have a more enlightened attitude to the use of modular wiring solutions. In part this may simply be because the client is more "dictatorial" as to the solutions they wish to see used but also there is the issue that there

are proportionately fewer consultants for the amount of work that is underway and there is more urgency to get on with business using the most effective and rapid methods.

- Do not miss out on the commercial opportunities simply because of the well publicised low local labour rates. An hourly rate of £2 disguises low productivity and reworking which when accounted for equates to an hourly rate of £15 plus the cost of accommodation, transport, and visas.
- With the support of the local contractors Apex has been able to modernise local installation practices eg utilising a combined conduit and cable installation as a single process as an acceptable alternative to the installation of conduit and then the installation of the wiring.
- Not really an option to use UK recruited labour. Dealing with local labour is a hassle.....very close supervision and detailed instruction is both essential and expected. Apex has provided UK recruited project managers.
- In Abu Dhabi project managers tend to be expat Brits, South Africans and Australians.
- Apex has been very selective about the projects it has worked on. The key considerations have been to ensure that the construction method is going to be most compatible with the installation of modular wiring and to simplify matters (including supervision) by concentrating on projects involving considerable repetition. Apex have concentrated on hotels and residential developments whereas in the UK their core business is commercial.

With the support of Apex Buildoffsite will be hosting another Discovering Offsite visit to Apex's Durham manufacturing facility. Details will be published shortly on the Buildoffsite Website.

Generic Floor Cassettes

In June of this year, Buildoffsite embarked on a project to develop a generic industry standard specification for floor cassette systems. The generic specification would target industrial and commercial type buildings and would also be suitable for housing and non-housing applications.

The catalyst for this initiative was the discovery of several organisations developing floor cassette systems for their specific application needs. These floor cassette systems were developed in isolation, at their own R&D expense and without the benefit of collaboration from the industry. Great Portland Estates, BAA and GSK are good examples that demonstrate this.

In view of the above, it was agreed that this would be a great opportunity to develop in collaboration an industry wide standard generic specification(s), taking into account different variations, applications

and interfaces with other components.

This collaborative approach across the industry will help to standardise components, achieve economies of scales, with the added benefit of reducing individual organisation's research and development costs. This will also help with the acceptance of product innovation for risk adverse organisation, finance and insurance companies.

Workshops are being set up in September and October to elicit input from a wide breadth of contributors from the industry, and will include: client and operational staff perspectives, and from subject matter experts i.e. Architects, Engineers, Suppliers, Construction Managers, and Cost Managers.

The purpose of these workshops is to identify the requirements (what is needed & why) from an industry perspective, rather than focusing on solutions. The output from these requirements gathering sessions will form the basis to develop a suite of generic industry standard specifications.

Once the specifications are complete (target date March 09), suppliers would be able to submit their proposed products in response to the specification(s) and have them evaluated through the Buildoffsite registration scheme operated by Lloyd's Register.

Looking at the bigger picture, this will be the first phase in achieving an integrated building cassette system, a suite of generic specifications: exterior walls, floors, roofs and associated interfaces.

In addition, this is also an initial step towards creating a common catalogue across the offsite industry which could be centrally supported by Buildoffsite.



Photos courtesy of Great Portland Estates Example 1 – Precast soffit with reinforced and post tensioned concrete slab above



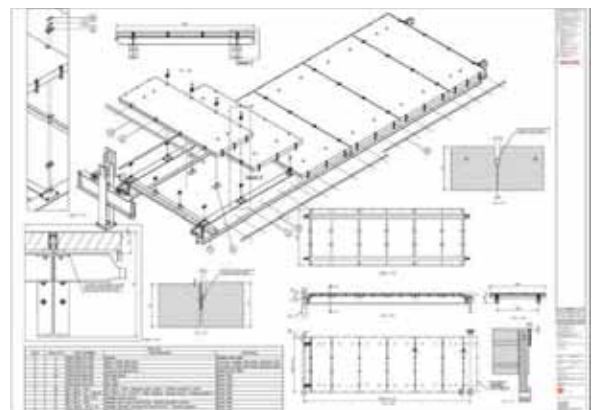
Photos courtesy of BAA Example 2 – SPS (steel) Floor



Photos courtesy of BAA Example 3 – TechniK Monolithic



Photos courtesy of GSK Example 4 – Precast concrete deck with steel frame and connectors



OXFORD BROOKES UNIVERSITY

The School of the Built environment at Oxford Brookes University has a large research portfolio and a major group specialising in off-site manufacture and modern methods of Construction. This group led by Professor Ray Ogden has capabilities in building physics, construction and construction economics and is notable for its 'close to industry' working. It has been a strategic research partner of Corus for many years and hosts the Corus Centre for the building envelope. It has been centrally involved in the development of several modular systems for UK and international manufacturers, has state of the art computer modelling facilities for thermal and lighting design and maintains laboratory facilities for structural and building physics testing.



Discovering offsite tours

WOLSELEY

UK

Date: 17 September 2008
Venue: Sustainable Building Center
Host: Keith Leonard – Offsite Construction Wolseley UK LTD

Description

Wolseley has opened the UK's first commercial showcase for sustainable building products and construction methods. The Wolseley Sustainable Building Center, at Leamington Spa in Warwickshire, aims to accelerate the UK building industry's move to embrace sustainable construction.

Built at a cost of £3.2 million, the 6,800 sq ft Sustainable Building Center is a living, interactive centre for decision-makers throughout the construction industry.

The unique new building will help make sustainable building a reality. It will enable all involved in construction - from architects through to jobbing builders - to experience the latest technologies and the widest range of sustainable, energy-efficient and recycled building products. For the first time it brings together information about 7,000 sustainable products that are available now, through Wolseley's 1,800 branch network.

The Sustainable Building Center is already attracting great interest from some of the UK's leading developers and property companies engaged in major building programmes. Even before its official opening, more than 100 visits to the Center had been scheduled by customers and other interested groups.

The building itself features 170 types of products, including: photovoltaics; micro wind; sedum roof; e-glazing; natural lighting; natural insulation; green floor coverings; mini Combined Heat and Power (CHP); rainwater harvesting; biomass; ground source heat pump; engineered timber; low energy lighting; water saving devices; solar thermal; and sustainable drainage.



Loughborough University 'Discovering Offsite' Tour

Date: 29 October 2008

Time: 10.00am – 2.00pm

Venue: Loughborough University

Tel: 01509 223097 / 01509 228529

Host: Alistair Gibb

Explanation of organisation and tour

Loughborough University hosts one of the UK's leading built environment research centres. The Loughborough team has been at the forefront of innovation research, with a particular focus on off-site, for the last decade. This 'Discovering Offsite' tour will provide an opportunity to find out more about the research at Loughborough. Two major projects will provide a focus for the event: 'Adaptable Futures' and 'Mega-Scale Freeform Construction'. Both projects are funded by the UK

Government through the Innovative Manufacturing and Construction Research Centre.

The 21st century economic & environmental drivers demand the re-evaluation of UK construction's obsession with bespoke developments. These include: faster design & production to reduce client uncertainty & cost; much wider adoption of lean manufacturing approaches (including offsite); & increasing demand for infrastructure reconfigurable to unpredictable future needs. Adaptables addresses these pressures by focussing on adaptability, in initial design choices (pre-configuration) & subsequent changes in use (re-configuration), of complex, non-domestic buildings. Working with industry partners GSK, 3DReid, BWM & Buro Happold, it aims to develop new technologies & techniques responding to the need for adaptability without creating unnecessary redundancy & thus significantly increasing the initial cost. Adaptables aims to overcome considerable technical, process-oriented & people-related challenges inherent in realising adaptable building solutions.

The construction industry still relies on craft based trades and still suffers from poor performance and quality. Labour shortages, environmental legislation and higher performance demands will compound these issues. Where are the innovations that have been called for? Where are the technologies for a 21st century construction industry? Who is driving the development of new materials and process? Loughborough is embarking on an adventurous piece of research that will take construction technology way beyond anything the industry has seen – Mega-scale Freeform Construction. The step change technology will print full-scale building components, layer by layer, freeing the constraints of straight line form, allowing full systems integration. The new technology uses computer-based 3D solid modelling to drive precise control of construction material deposition... just click 'Print' for your building.



Innovaré Discovering offsite TOUR

Date: 27th November 2008

Venue: I-S Manufacturing
Fletchamstead Way
Westwood
Coventry
CV4 9XL

Host: Andrew Orriss.

Innovaré is a supplier of a Structural Insulated Panel building system, i-SIP. Working with their sister company I-S Manufacturing, based at Coventry, they now provide a complete chain of custody of their offer which includes all internal partitions (load bearing and non load bearing), floor cassettes and roof panels/trusses which come together to provide a complete dry structure. Essentially Innovaré Design, Engineering, Manufacture, Supply and Erect.

The recent investment by the Innovaré parent company, Osborne Group, represents a significant step into manufacturing building products for the first time for this South East based contractor.

For more information please contact Anna Whiting on anna.whiting@buildoffsite.com or visit our website www.buildoffsite.com

2008 OSC Magazine Awards & Dinner

The second Offsite Construction Awards, hosted and organised by OSC Magazine in association with Interbuild, is due to take place on 28 October. Building on a highly successful first year, the 2008 version is shaping up to be a super evening celebrating quality, innovation and outstanding achievement. Although the last 12 months has developed into a tough trading climate across the economy, the offsite sector has been more buoyant than many other parts of the construction industry and is still delivering on-time and importantly on-budget.

With new awards available for Best Use of Sustainability and Best Product, the independent panel of industry experts including British Precast, BRE, Buildoffsite, Steel Construction Institute and the UKTFA, will form part of the judging panel to decide this years best in class.

Sponsors have also been quick to offer support for the Awards, including ARV Solutions, Combilift, Corus Living Solutions, Lloyd's Register EMEA, Mtech, Ruukki and Van Elle, alongside our regional hosts Advantage Offsite.

To accommodate as many entries as possible, the entry deadline has been extended to the 29 September. It is FREE to enter and the application process is very simple. For more information on the 2008 Awards and the Award Application Form visit: www.oscmagazine.com.

The OSC Magazine Offsite Construction Awards 2008 in association with Interbuild takes place on Tuesday 28 October at the National Motorcycle Museum, Birmingham.

Who are we?

Buildoffsite is

- exclusively and uniquely focused on off-site construction solutions
- a network of members and associates
- a group that includes leading clients, designers, constructors, manufacturers and others
- supported by Government
- focused on a shared commitment to work for a better construction industry through the increased use of quality off-site solutions
- committed to continuous improvement
- committed to doing things that make a difference.

Buildoffsite is not

- a trade association – but we do work with trade, research and other organisations who share our ambitions
- an apologist for off-site solutions
- opposed to traditional site based construction
- a “talking shop”
- creating Bureaucracies.

What we are working to achieve

- a step-change in the take up of off-site solutions across all sectors of the UK construction industry
- an industry wide appreciation of the quality productivity and sustainability benefits as a result of the effective and intelligent use of off-site solution
- a robust business case for off-site solutions
- a ten-fold increase in the current size of the market for off-site solutions by 2020.

What we do

Four main streams

- challenging... the industry to improve quality and value
- promoting... excellence in off-site enabled construction solutions
- developing... the tools to demonstrate value
- connecting... clients and suppliers.

Examples

- business-to-business networking
- ‘meet the client’ events
- virtual supply chain networking with clients
- technology awareness and promotional visits
- case studies
- tools to demonstrate the business value of off-site solutions
- facilitating collaboration on R&D
- workshops to focus on the construction needs of specific sectors
- market surveys
- product certification
- focus on major projects including the 2012 Olympics.

Members

AcerMetric
acumen 7
Anglian Water
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