

The Future of the Built Environment (6-7 June, Olympia London)

VISION 2017

One of the most sought after architect industry expos

Vision 2017 is the construction industry event focused on innovative products, materials and technologies. It will be held in Olympia London on 6th and 7th June. The programme and exhibition are CPD certified and centred around three main themes - Materials Innovations, Technological Insight and Architectural & Design Evolution.

VISION 2017 brings together over 80 major brands and innovative start-ups.

VISION 2017 attracts architects, contractors, designers, engineers, house builders, property developers, clients, surveyors, retailers and all involved in the building sector.

VISION 2017 offers Meetings Programme

which enables visitors to pre-arrange and book meetings with exhibitors. **VISION 2017** is CPD certified event.

VISION 2017 is over 70 hours of free seminars. During the event, the RIBA will be hosting presentations and debates targeting housing and sustainability. BRE will target the main issues facing the construction industry today, and New

London Architecture will be presenting the annual PechaKucha. Moreover, the London Festival of Architecture will be bringing their 2017 Festival theme 'Memory' to Vision.

VISION 2017 is free to attend and you can register for ticket at visionlondon.com

Source: www.visionlondon.com



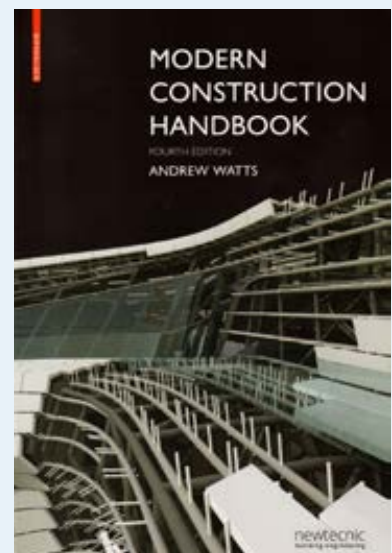
BOOK REVIEW

Modern Construction Handbook

by Andrew Watts 24 May 2016 edition

Highly recommended reference book containing case studies of innovative construction projects with detailed explanation of technical details, energy efficiency solutions and complex construction issues. All presented projects are designed by the well-known and respected architectural practices

like Zaha Hadid, BIG, Jean Nouvel, Gensler, Lab Architecture Studio, RMJM Architecture, Nordic Office of Architecture, etc. Rich in illustrations, photographs, 3D graphics, diagrams etc. Ideal reading for those who are looking for new approaches to building construction.



Construction Skills Academy by Mayor of London

Mayor of London, Sadiq Khan, plans to establish later this year a Construction Skills Academy in London as part of his Skills for Londoners programme to answer the skills shortages within the sector. It will help to close the gap between the demand for new housing in the capital and the need for more skilled construction workers. It will be set up in collaboration with industry experts.

Sadiq has also established a Skills for Londoners Taskforce comprising business leaders and employers, skills and education experts and London government representatives. The taskforce will develop a city-wide strategic approach so that Londoners and

businesses can access the skills they need for future success.

The Skills for Londoners Capital Fund will provide £114M in funding to deliver improved equipment and facilities at further education colleges and other education and training providers.

London has a strong, dynamic, global economy, but the region's employment rate has lagged behind the national average for three decades. More than 280,000 Londoners are unemployed, with particularly high rates of youth unemployment. London also has a growing problem of in-work poverty, associated with low-skilled, low-paid work. Ensuring an effective and responsive skills system is critical to tackling these issues.

Khan believes that an effective skills system is also critical to meeting the needs of London's businesses. Employers repeatedly report skills shortage vacancies and skills gaps in their workforce, impacting on growth and productivity. Given the uncertainty

surrounding the terms of Britain's exit from the EU, ensuring a more responsive skills system – as well as continued access to global talent – is more important than ever.

Khan said: "While London is a great place to learn, there is no doubt that not enough Londoners are getting the skills they need to live up to their potential. This also impacts businesses, hampering their growth and forcing them to look further afield for talent.

"Now that we are leaving the European Union, it is more important than ever that we make sure more Londoners gain access to the skills they and our economy truly need.

"Through Skills for Londoners, we will address these problems head-on, giving Londoners the chance to train in the skills that will boost our economy and creating a pipeline of local talent and expertise for our businesses to tap into."

To read more about Skills for Londoners, visit www.london.gov.uk/skills



Reduce costs and avoid disputes with

PROGRESSCLAIM.COM

Manage all contracts.

Anywhere. Anytime

New software is available in the UK construction sector allowing for quick and easy payment claims processing for builders and contractors. The building process is complex, risky and dependent on a variety of factors so issues concerning time extensions, defects, additional costs are very common.



Builders, contractors and clients often have to deal with payment disputes. Payment disputes stop production and prolong process realisation. Cash flow problems are the main cause of business failure in the industry. Payment claim administration is time-consuming and expensive, and projects end up with the higher cost.

Progressclaim.com is the specially designated software for construction industry launched in 2011 in Australia. It connects contractors to a standard platform allowing for quicker administration of payment claims via mobile devices, laptops, tablets, etc. This payment solution enables subcontractors to be paid within two days instead months.

The platform challenges the industry norm that currently sees the subcontractor supply and pays for their labour and materials to complete work as quoted, then lodge a progress claim with the general contractor for payment that can often take between 60 and 100 days to be received.

Lincoln Easton, founder and CEO of progressclaim.com realised the mobile phones and the cloud could be handy in making the process less time-consuming. He took the spreadsheet that is commonly used in the construction industry, usually passed

around through the post or email, and made it available on the cloud, so that it could be accessible to all parties involved. The Progressclaim.com software was released at the beginning of this year, after being trialled by Mirvac, a leading real estate group, and Built, a construction company with sites all across Australia. After using Progressclaim.com at a number of these sites, Built is now operating the software at all of its building sites. CFO Emma Shipley said, "We're already using Progressclaim.com and have noticed in some projects a 40% saving in time." Despite Easton's early plans for the software pointing more towards use in the small to medium-sized businesses that make up the majority of the construction industry, since its release, large government developers and companies overseas have also registered their interest.

This powerful tool for the general contractor can be easily used for all projects. It reduces contract risks and increases profits. It is easily accessible on mobile devices and can be easily integrated with the leading software.

Progressclaim.com is compliant with construction act so it is reducing exposure to risk. Better risk control, time savings and more efficient project management.

Progressclaim.com allows for automated payment reminders every month or as set up. Also, it allows for the creation of individual applications for payment which are prepared online and backed up allowing for project documentation.

As a collaboration tool, the general contractor is the administrator of the system and sets up the contracts. The other parties are then invited to join by email. Each month automated reminder emails are sent to submit applications for payment, which are prepared online, in seconds, by simply updating completions. Conforming documentation is then produced instantaneously and delivered by email, and seamless integration with leading construction software packages provides a complete end-to-end solution.

Builders, developers, subcontractors and consultants can work simultaneously on the same, trusted and neutral platform for contract billing and approval benefiting from:

- automated payment applications
- improved payment documentation
- Construction Act risk compliance
- improved collaboration on the neutral platform
- transparency

Source: progressclaim.com



Working at height

Biggest hazard on building sites



Building Safety Group, the UK leading construction safety group providing Health, Safety and Environmental advice carried out the survey about construction site hazards. According to BSG, working at height remains the most significant danger on building sites in the UK.

The report was based on the findings of over 2,000 site inspections carried out last year, with working at height accounting for 19% of all incidents recorded. The total number of incidents in 2016 logged by safety officers was 24,634, with the second biggest breach of regulations coming in the shape of dust/fumes at 5%.

The results follow a similar pattern to latest figures on the construction industry published by the Health and Safety Executive (HSE), which placed falls from a height as the most common cause of fatalities in the workplace, despite a drop in the overall numbers.

On the last five years, 97 construction workers were killed, accounting for 45% of all fatal injuries. Falls from height were also the number

one cause of non-fatal accident related injury, responsible for 33% all non-fatal injuries, including 11% of the injuries resulting in the absence of more than seven days.

The report also revealed that the three main causes of falls from height injuries and fatalities are fragile roof lights, scaffolding and ladders – all of which are easily preventable.

Building Safety Group's Technical Manager, Chris Chapman, commented: "Working at Height is clearly the most dangerous activity carried out in the construction sector. Everyone can do more to ensure that work is properly planned, supervised and conducted by qualified workers who have the required skills for the task at hand.

"To significantly reduce the dangers of working at height, construction companies should always try to complete as much work as possible from the ground, ensure safe access and egress and importantly, make certain that any equipment used is suitable, stable and strong enough for the job."

Working at height is not only the biggest risk for contractors but also for employers. Last month Martinisation (London) Limited had been found guilty of manslaughter following the death of two workers. Tomasz Procko, 22, and Karol Syman-ski, 29, were killed in November 2014 during the renovation project for a multi-million pound flat in

London. A jury found Martinisation (London) Limited guilty of health and safety breaches and two charges of corporate manslaughter. Workers were killed as railings being used for support gave way as they attempted to haul a large sofa up over a balcony.

The project in Cadogan Square - located between Harrods and Sloane Square - was behind schedule and £400,000 over budget when the fatal accident happened, prosecutor Adrian Darbshire QC said.

Prosecutor Adrian Darbshire QC told jurors how the incident occurred: "As they hauled the sofa up about 20 feet to the level of the balcony, the workers were hauling against, and leaning over, the balustrade.

"The 130-year-old Victorian cast iron balustrade gave way and two of the men fell to their deaths on the pavement below. A third was saved only by being grabbed by his colleagues as he began to fall.

"The fact that the men were hauling the sofa up in the dangerous way that they were was the result of a long and unhappy history of neglect of health and safety at the company which employed them." Mr Darbshire described the tragedy as an "entirely foreseeable and preventable one."



Think construction toolkit

Last month, the Chartered Institute of Building (CIOB), the world's largest and most influential professional body for construction management and leadership, launched the 'Think Construction' toolkit, developed in partnership with teachers and young people to help structure careers advice sessions. CIOB aims to change the negative image of construction sector that is preventing young people to proceed with their careers in construction industry. CIOB is also targeting schools and colleges through My Kinda Future and Craft Your Future, the industry's first Minecraft lessons.

The toolkit contains films, presentations, case studies, games and other content to describe the many managerial career opportunities on offer across the sector that are open to those both with and without a degree. CIOB is also working with Inspiring the Future to provide a match-making service which facilitates introductions between

schools and CIOB members and their firms.

Jacqueline Balian, Commercial Director at the Chartered Institute of Building said:

"We are very conscious many pupils and schools are only aware of the trade level jobs in construction and that is hampering the sector's recruitment scope. We aim to show the full range

of management positions and help our members attract the new people they need.

"Now that they have clear targets in terms of careers advice, schools are looking for people to talk to pupils about careers and CIOB Members can volunteer to do that. We are particularly keen to get our Novus Members involved where they can talk in schools about their job and what it's like to work in construction. We are asking Members to give us just one hour of their time to inspire young people into the sector."

She added: "We think this will also help our members develop their presentation skills and the pack gives them all the content they need to do a really engaging presentation including video clips, games, information and presentation templates." To access the toolkit visit www.ciob.org/campaigns/think-construction

Source: CIOB





THINKING ABOUT YOUR CAREER CHOICE? THEN THINK BIG

Construction accounts for 2.6 million jobs in the UK with 224,000 new jobs being created over the next five years. So when you're thinking about career options, think construction.

Construction is a career like no other.

goconstruct.org

Industry led, funded by the CITB levy

 **CONSTRUCT**

RIDDOR

Reporting Rules

Construction sector accounts for approximately 6% of the UK workforce. Each year almost 4% of construction workers suffer from the work-related disease, and 3% sustain a work-related injury. Recording and reporting of work accidents are essential to manage and improve the health and safety in the workplace. RIDDOR is a law.

RIDDOR is the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013. Reporting certain accidents is a legal requirement. Employers, the self-employed and people in control of work premises have a duty to report certain serious workplace accidents, occupational diseases and specified dangerous occurrences.

Here is the summary of reportable incidents:

The death of any person

All deaths to workers and non-workers, with the exception of suicides, must be reported if they arise from a work-related accident, including an act of physical violence to a worker.

Specified injuries to workers

The list of 'specified injuries' in RIDDOR 2013 replaces the previous list of 'major injuries' in RIDDOR 1995. Specified injuries are (regulation 4):

- fractures, other than to fingers, thumbs and toes;
- amputations;
- any injury likely to lead to permanent loss of sight or reduction in sight;
- any crush injury to the head or torso causing damage to the brain or internal organs;
- serious burns (including scalding) which: covers more than 10% of the body causes significant damage to the eyes, respiratory system or other vital organs;
- any scalping requiring hospital treatment;
- any loss of consciousness caused by head injury or asphyxia; and
- any other injury arising from working in an enclosed space which: leads to hypothermia or heat-induced illness requires resuscitation or admittance to hospital for more than 24 hours.

Over-seven-day incapacitation of a worker

Accidents must be reported where they result in an employee or self-employed person being away from work, or unable to perform their normal work duties, for more than seven consecutive days as the result of their injury. This seven day

period does not include the day of the accident but does include weekends and rest days. The report must be made within 15 days of the event.

Over-three-day incapacitation

Accidents must be recorded, but not reported where they result in a worker being incapacitated for more than three consecutive days. If you are an employer, who must keep an accident book under the Social Security (Claims and Payments) Regulations 1979, that record will be enough.

Non-fatal accidents to non-workers (e.g., members of the public)

Accidents to members of the public or others who are not at work must be reported if they result in an injury and the person is taken directly from the scene of the accident to hospital for treatment to that injury. Examinations and diagnostic tests do not constitute 'treatment' in such circumstances.

There is no need to report incidents where people are taken to hospital purely as a precaution when no injury is apparent. If the accident occurred at a hospital, the report only needs to be made if the injury is a 'specified injury' (see above).

Occupational diseases

Employers and self-employed people must report diagnoses of certain occupational diseases, where these are likely to have been caused or made worse by their work: These diseases include (regulations 8 and 9):



- carpal tunnel syndrome;
- severe cramp of the hand or forearm;
- occupational dermatitis;
- hand-arm vibration syndrome;
- occupational asthma;
- tendonitis or tenosynovitis of the hand or forearm;
- any occupational cancer; and
- any disease attributed to an occupational exposure to a biological agent.

Dangerous occurrences

Dangerous occurrences are certain, specified near-miss events. Not all such events require reporting. There are 27 categories of dangerous occurrences that are relevant to most workplaces, for example:

- the collapse, overturning or failure of load-bearing parts of lifts and lifting equipment;
- plant or equipment coming into contact with overhead power lines; and
- the accidental release of any substance which could cause injury to any person.

Gas incidents

Distributors, fillers, importers & suppliers of flammable gas must report incidents where someone has died, lost consciousness, or been taken to hospital for treatment to an injury arising in con-

nection with that gas. Such incidents should be reported using the online form.

Registered gas engineers (under the Gas Safe Register,) must provide details of any gas appliances or fittings that they consider to be dangerous, to such an extent that people could die, lose consciousness or require hospital treatment. The danger could be due to the design, construction, installation, modification or servicing of that appliance or fitting, which could cause:

- an accidental leakage of gas;
- incomplete combustion of gas or; and
- inadequate removal of products of the combustion of gas.

Unsafe gas appliances and fittings should be reported using the online form.

Few examples of incidents related to construction works that have to be reported:

- The collapse of the scaffold that is over 5 meters high
- The self-employed sub-contractor is incapacitated for over seven days due to the accident on site- these should be reported by the foreman or principal contractor, but if the self-employed sub-contractor was in control of the building

site then they should report themselves

- During the construction work, the structure for concrete pouring collapses, but there are no injuries- all failures of false-work have to be reported

How to record and report?

Firstly, it is required to keep records of any RIDDOR incidents. If you are an employer, you should keep an accident book and record all accidents in it ready to show to HSE, local authority or ORR inspectors. The records must include details regarding the incident or disease, personal data of workers involved, time and place of the accident and the date and method of reporting. Records must be kept for a minimum period of three years.

The responsible person, for instance, the principal contractor should submit records via RIDDOR online reporting system on hse.gov.uk. Online form should be sent and printed for record. Fatalities and major injuries can be reported by phone. You can contact the Incident Contact Centre on 0845 300 9923. A report must be received within 10 days of the incident or 15 days for accidents resulting in the over seven-day incapacitation of a worker.

(Source: HSE)

NEC4 engineering and construction contract

The next generation of NEC Contracts will be available from this month. The NEC Contract Board's Matthew Garratt (Commercial Director with Costain) revealed that NEC4 would be launched at the NEC Users' Group Annual Seminar 2017 at the County Hall in London on 22nd June 2017.

NEC4 is the updated and refreshed version of the NEC3 contract. It has been designed based on the innovation and 20 years of users feedback to support technology, innovation and digitalization of the construction industry and enhanced collaboration. Moreover, it will reflect procurement with provisions for BIM or project management developments, emerging best practice with improvements in flexibility, clarity and the ease of administration with reduced administrative costs. The NEC4 contract will be designed for international use.

NEC3 contracts were used for iconic projects, like for instance the London 2012 Olympics, Crossrail, Christchurch International Airport and the Halley VI British Antarctic Survey research station. The use of NEC3 and its ongoing training provision across all disciplines will continue to be fully supported alongside the introduction of NEC4 training, events and support services.

NEC4 will introduce two new contracts: NEC4 Design, Build and Operate Contract (DBO) and the consultative NEC Alliance Contract (ALC).

NEC4 Design, Build and Operate Contract (DBO) allows the procurement for whole project phases, combining responsibility for design, construction, operation and maintenance from a single supplier. It can include a range of different services to be provided before, during and after engineering and building works are completed.

The NEC4 Alliance Contract (ALC) will be pub-

lished initially in a consultation form. It was created to support Clients who wish to take a step forward by fully integrating the delivery team for large complex projects. ALC contract is designated to be used for large collaborative projects with some participants to deliver the project or programme of works.

Rekha Thawrani, NEC Contracts General Manager, commented: "The UK built environment sector stands on the precipice of a truly digital and collaboration revolution. An evolution built on the collaboration, feedback and endorsement of you, our users, NEC4 embraces the outstanding collective working practices already transforming the industry, to make them accessible, practical and affordable for all.

"Uptake of NEC products and services has grown exponentially across the globe over the last 20 years, and we pride ourselves on the fact that our innovative

portfolio will always react to and be shaped by the needs, experiences and feedback of our users.

"As part of our commitment to all our customers, we continue to constantly review ways to enhance and update our products. We believe NEC4's diverse range of definitive end-to-end project management contracts will empower users to deliver projects on time, on budget and to the highest standards now and in the future to the benefit of both industry and society."

NEC4 will help you to deliver the project on time, on budget and to the highest standards. It promotes fairness in the construction sector, helps prevent litigation and supports flexibility.

For more information about NEC4 visit www.neccontract.com

Source: The Institution of Civil Engineers



Drones

in building inspections

West Sussex Council is trying drones during the bridges inspections across the county. Inspections are required every two years for the public safety. In collaboration with Balfour Beatty Living Places council carries out trials. Drones technology could cut costs of inspections and savings of approximately 8,000 where achieved on inspections at Swan Bridge in Pulborough and Adur Ferry Bridge in Shoreham-By-Sea.

Traditional methods are costly due to traffic management, while drones does not require additional workforce and reduce health and safety risks and costs. Drones record footages allowing for better inspection the condition of bridge. Cameras records drones work reviewing safety parameters in the real-time.

Protective floats are fitted onto the drones to allow them to land safely on water if necessary

and onboard GPS systems prevent encroachment into no fly zones such a airport space without prior consent.

Steve Phillips, Contract Director for Balfour Beatty Living Places, said: "Using drones in our high-ways inspection work allows us to safely assess the work required while dramatically reducing any potential hazards faced by our workforce who would traditionally carry out work such as bridge inspec-

tions at height. It's a great example of how modern technology can be successfully used by industry."

West Sussex County Council's Infrastructure Manager, Kieran Dodds, said: "The use of drones enables us to obtain the necessary information to determine our highway structures are safe for use, while reducing the risk to our inspectors who conventionally would have to use access equipment when working at height."



General election and construction industry

The Home Builders Federation (HBF), the representative body of the home building industry in England and Wales, offered proposals in 'Blueprint 2017: A plan to deliver even more new homes' for new government on how housebuilding can provide a social and economic boost.

The government should focus on the policies to allow builders to expand and to support smaller firms and new entrants into the industry. In the past three years the supply in house building by over 50% and the Government should aim to expand the output even further.

HBF's proposals include:

- Promoting policies that enable more builders to build - in particular SMEs - such that they can play their part in increasing output further

- Providing certainty about the future of the Help to Buy scheme which has been absolutely key in the increases in supply to date
- Delivering further improvements to the planning system. The time consuming and bureaucratic nature of system remains a constraint on increasing supply. Delays and costs deter new entrants and prevent construction work starting
- Developing policies that encourage more specialist homes to be built to meet the needs of our ageing population
- Encouraging better collaboration between infrastructure planners and house building. Builders pay millions each year towards improved infrastructure and more effective coordination would deliver considerable benefits for communities while accelerating delivery.

'Blueprint 2017: A plan to deliver even more new homes' sets out in detail what the new Government needs to do in each of these areas to increase supply to the level the country needs.

Stewart Baseley, executive chairman of the Home Builders Federation said; "Housing supply has increased significantly over the past three years, but if we are to raise our sights still further and better match supply to demand, Government needs to play its part.

"House builders already have a strong desire to continuing boosting supply, as evidenced by the huge investments being made by the country's largest builders in the land and workforce needed to deliver additional homes. Ensuring a policy environment that promotes development will allow this investment to be sustained.

"Over decades building homes has become increasingly costly and risky as developers have been bogged down in red tape and inevitable delays. That has driven out small firms and prevented new entrants from contributing. Encouraging greater entrepreneurialism in the sector could help boost housing supply by tens of thousands a year

"The social implications of our housing shortage are becoming ever more apparent with today's young people struggling to own a home, high rental payments preventing them from saving for a mortgage deposit and ever more people in sub-standard





or temporary accommodation and on local authority waiting lists. Building homes helps address social issues, whilst creating jobs both directly and in the supply chain and delivering investment in existing communities. “Delivering more desperately needed high quality homes will both help strengthen our society and give our economy a boost in the uncertain years ahead.”

The Institution of Civil Engineers (ICE) also published the election manifesto, including five key areas for all political parties to consider following the 2017 general election. These areas are skills, investment, innovation, productivity and Brexit negotiations.

The infrastructure is in the heart of the manifesto as the main drive of economic growth with the capacity to create jobs and significantly improves quality of life. ICE states that:

- The UK needs a long-term strategic approach to infrastructure provision that can cope with future uncertainties.
- Brexit negotiations consolidate the UK's status as an attractive location for infrastructure investment: Ensuring that the

Brexit negotiation process does not disrupt the healthy pipeline of projects and established models will mean that investors, financiers and developers will continue to have a positive view of the UK.

- The UK avoids a self-inflicted skills crisis: Guaranteeing the status of EU nationals working in the UK.
- The UK is allowed to become a global leader in infrastructure innovation and technology: Ensuring that infrastructure remains a priority in any Industrial Strategy, with a programme to exploit the UK's existing advantages in innovation and technology.
- Productivity and regional growth are driven through the nation's infrastructure: There is a direct connection between the efficiency and effectiveness of our infrastructure and productivity within communities across the UK. All parties should commit to delivering a Modern Industrial Strategy so that infrastructure services increase productivity.

ICE Director General Nick Baveystock said: “Effective, efficient and innovative infrastructure is at the heart of a thriving, successful and modern economy. The transport energy and housing that we all depend on would simply not function without it. That is why we are asking all parties now running for election to focus their efforts so we continue to deliver world-leading projects, on time and on budget, that change people lives for the better.

“If enacted the five areas in our election manifesto would provide the stable foundations for the UK's infrastructure sector to implement the National Needs Assessment and avoid serious pitfalls in a politically uncertain world.

“When infrastructure projects flourish, the entire economy benefits. We know that £1 of infrastructure construction raises economic activity by £2.84. The sector also helps boost employment. Every 1,000 direct jobs created by the delivery of new infrastructure boosts wider employment by over 3,000 jobs.”

Source: HBF; ICE