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Cover

The cover show a computer-generated image of the Titanic Belfast Experience, where the President's Annual Dinner Dance will take place, hosted by Northern Ireland Region, this November. Find out more see page 15 of this issue.

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BIM

The guidance is (almost) here

It has been two years since the Government made its commitment to compulsory Building Information Modelling (BIM) on major public projects by 2016. Full guidance on implementation is only now becoming a reality. **Keith Snook HonMCIAT** looks at what has been happening.

Some time ago I wrote an article for this publication, *What BIM really is...and isn't*. (AT97 September/October 2011). It was generally well received, though my dismissive remarks about buying BIM software and using it only for flashy 'spinning Tardis' graphical stuff and not for holistic data management upset one or two who have become expert at that.

I certainly don't deny it can be fun and can impress, and used constructively can be helpful with client, planning and other uses, where it can help with visualisation. I have nothing at all against imaginative graphics. In a previous life long ago when even CAD was deemed exotic, I remember writing (elsewhere) about the beneficial use of 3D and perspective free-hand sketches and citing examples from a well known series of car maintenance manuals. In the previous article I promised a follow up, and much longer has passed since I suggested this. The problem is the speed/sequence of developments not in technology but in the government driven agenda to get BIM adopted in a solid and demonstratively better way.

Figure 1 (*opposite*) has been around since just before the announcement by Chief Construction Advisor Paul Morrell about the requirement for BIM made in September 2010 – that government will require BIM to level 2 by 2016 in significant projects involving public expenditure. The figure is actually based on the roadmap for essential documentation to support the introduction of the various levels of BIM from an ongoing BSI committee (B/555 to give it a label). All kinds of people have taken it and used it, sometimes inappropriately in the intervening period – including me, but at

least I was there as a member of B/555 when it was conceived. I make no apology for reproducing it again here (for those of you who have seen it before) as in some ways what was conceived as a plan is now just becoming a reality and whilst nothing was 'secret', to some extent it has been awkward up to now with so much of it in the 'coming soon' category.



All kinds of people
have taken it and
used it, sometimes
inappropriately'

Bearing in mind the BIM strategy is a part of the construction /strategy for government and driven primarily by the needs of operation (ie post occupation) of their constructed estate it reinforces my comments about the most important factor being the passage of essential data. The 'levels of BIM maturity' are as follows:

0.CAD probably 2D, with paper (or electronic paper, eg PDF) as the most likely data exchange mechanism and little or no management of the data between disciplines.

1.Managed CAD in 2 or 3D format using BS1192:2007 with a collaboration tool providing a common data environment,

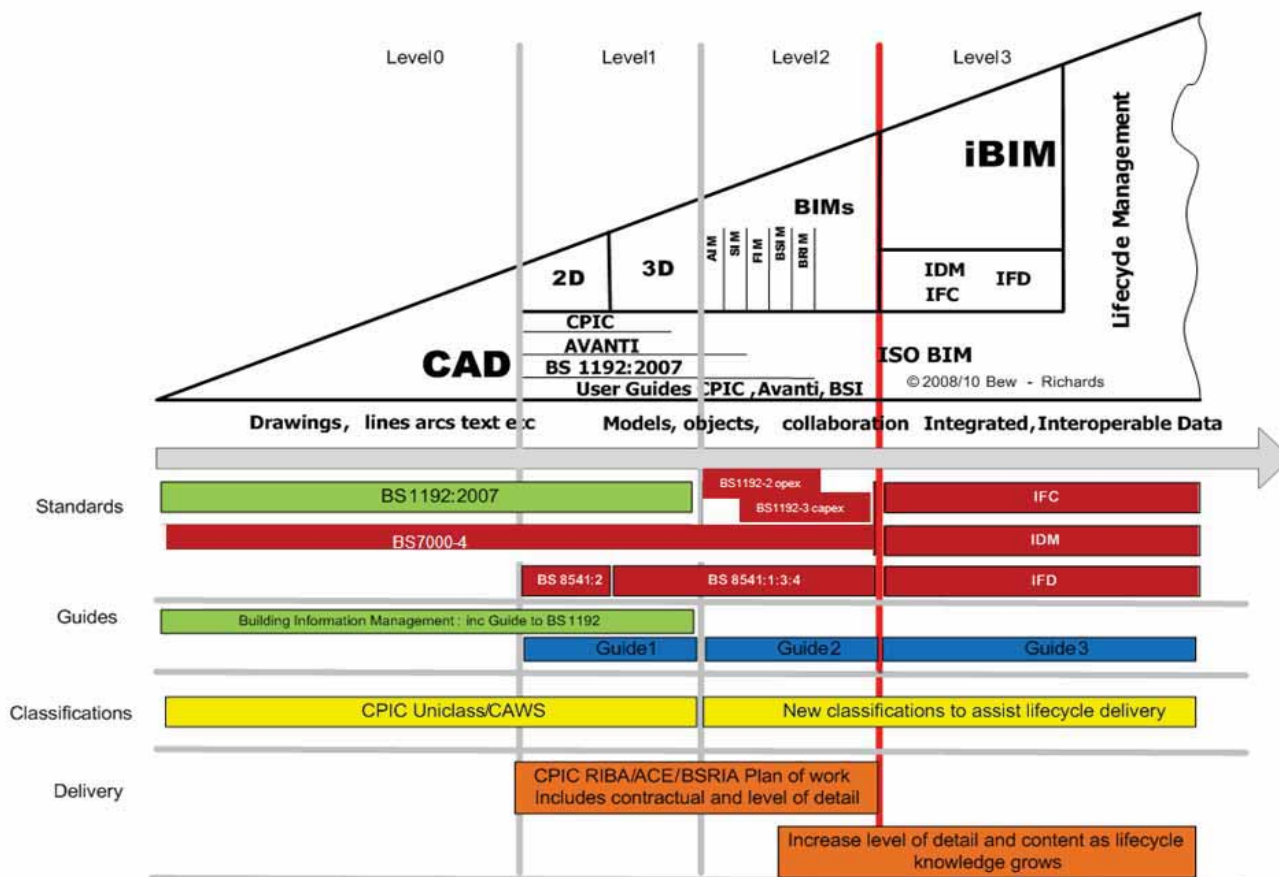
possibly some standard data structures and formats. Commercial data managed by standalone finance and cost management packages with no integration.

2.Managed 3D environment held in separate discipline 'BIM' tools with attached data. Commercial data managed by an ERP (Enterprise Resource Planning) organisational software. Integration on the basis of proprietary interfaces or bespoke middleware could be regarded as 'pBIM' (proprietary). The approach may utilise 4D Programme data and 5D cost elements.

3.Fully open process and data integration enabled by IFC/IFD*. Managed by a collaborative model server. Could be regarded as iBIM or integrated BIM potentially employing concurrent engineering processes.

Items indicated in green are existing documents available in the market today. BS1192:2007 Collaborative production of architectural, engineering and construction information. Code of practice is a combined data and process standard and is equally applicable at levels 0 and 1. It provides a reference document for level 2 and offers advice for the management of traditional CAD managed data delivery and works with both paper and electronic formats.

CPIC (Construction Project Information Committee) and Avanti (the collaborative industry initiative) have produced guidance to support implementation of BS1192:2007. Further guidance documents, shown in blue are planned with the first – on PAS 1192-2 – due soon.



An update of the BS7000: 4 about design management will cover up to level 2 BIM but is dependent on the publication of PAS1192-2 and will be put to public comment shortly after the publication of that key document.

Documents about symbols are at various levels of completion:

BS 8542:1 2D Symbols – Schematic denoting content and/or process. Example: Schematic floor layouts or Process and Instrumentation Diagrams (P&ID).

BS 8542:2 3D Symbols – To represent the analysed and designed output as the first level representation in a real world. Also contains design and specification information as Meta Data.

BS 8542:3 Object orientated representation of actual objects and the real world representation of the product with all attendant Meta Data.

PAS 1192 –2 and 3 will eventually become BS 1192 parts 2 and 3, but due process requires their publication as a 'Publicly Available Standard' first. They will still relate back to BS1192 2007 which will be revisited and reissued as BS 1192 – 1. Clearly this documentation must be specific to intended audiences as the needs of clients, suppliers and users differ significantly. For this reason the documentation will be provided in two documents focusing on the 'Capital Delivery' phase and the second on 'Operational Delivery'

issues. Both will document both data and process management issues.

BIM is about data and the Uniclass system, whilst already the most comprehensive worldwide, is undergoing significant updates to

“
There is even tacit agreement for all the institutions to produce one harmonised plan’

cope with the rigours of data exchange in BIM (yellow). This is still in public comment – though NBS have already implemented some of the new classification in the BIM ready NBS Create. Please visit the consultation on the CPIC website <http://www.cpic.org.uk/en/>

I am sure you will have read about the developments in what I prefer to call 'process planning' (brown) Since the figure was prepared this aspect has been embraced by the CIC and you may well have contributed to a recent consultation. There is even tacit agreement for all the institutions to come

together and produce one harmonised plan of work in readiness for BIM level 3 – what a boost that would be BIM or no BIM.

The real key document in all this is the PAS 1192-2 which is a bit late but due out any time now – this will release BS 7000-4 the first new guide and a number of other documents including some not on this diagram.

One further development is the new government website which is increasingly becoming populated with interesting information [/www.bimtaskgroup.org/](http://www.bimtaskgroup.org/)

There is quite a lot to say and there are more helpful developments in the pipeline – like the answer to the question 'what happens after the government stops driving this initiative in 2016?' so I hope to write another article on this topic soon.

Keith Snook HonMCIAT works for the Building Research Establishment (BRE) and was formerly Director of Research and Development at RIBA.

**IFC (Industry Foundation Classes) or IFD (International Framework for Dictionaries) is a data model to facilitate interoperability, commonly used in BIM.*

For more information on BIM, visit the BIM section and forum at www.ciat.org.uk and the CIAT BIM/DM group on LinkedIn.

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Acoustic testing

What is actually measured?

Acoustic testing is an increasingly important part of construction regulation.

Rebecca Hogg, Acoustic Consultant at the Building Services Research and Information Association (BSRIA), explains the mystery behind the measurement.

In our experience one of the most common misunderstandings when declaring or interpreting sound levels is the difference between sound pressure level and sound power level.

Very simply sound pressure levels are dependent on the specific acoustic environment, and sound power levels are independent of the acoustic environment. The aim of this article is to explain what is actually being measured during acoustic testing.

What is sound?

A basic analogy for explaining sound is heat. An electric heater emits a certain amount of heat, similar to the sound power emitted by a sound source. In order to quantify the heat emitted by the heater temperature measurements may be taken around a room. The measured temperatures vary around the room and are dependent on the thermal characteristics of the room, much like sound pressure levels being dependent on the acoustic characteristics of a room.

What is being measured?

A sound source, such as a heat pump, located in a room emits sound power, expressed in Watts. The sound power emitted radiates away from the source, causing small fluctuations in the air pressure throughout the room, much like ripples across a pond.

Sound power cannot be measured directly and therefore the pressure fluctuations are measured using a sound level meter. The sound pressure levels will vary around the room, due to the specific acoustic characteristics of the room. The sound pressure level measured at different points will differ, even if the sound power level emitted by the heat pump remains constant.

The sound power levels and sound pressure levels are stated using the decibel (dB) unit. The decibel can be confusing as it is often assumed to be an absolute unit, such as metres or grams. The decibel is actually a logarithm of a ratio of two different values. Because the absolute values for sound power and pressure

cover a huge range, the decibel unit therefore provides a more convenient range of values.

Sound pressure levels v. sound power levels

A sound pressure level of 0 dB is the threshold of human hearing and a sound pressure level of 120 dB is the threshold of pain. The human ear is frequency dependant, being more or less sensitive at certain frequencies, so a weighting system is used where the A-weighted sound pressure level is an approximation as to how the human ear perceives sound, expressed in dB(A).

The first table (below left) gives typical sound pressures and sound pressure levels for a range of sound sources. The measured sound pressure level and the acoustic characteristics of the room where the measurements were carried out are used to determine the sound power level.

The second table (below right) gives typical sound powers and sound power levels for a range of sound sources.

Sound pressure/sound pressure levels.

Sound Source	Sound Pressure	Sound Pressure Level at 1m, L_p , re 20 μ Pa
Rifle	200 Pa	140 dB
Threshold of pain	20 Pa	120 dB
Pneumatic hammer	2 Pa	100 dB
Street traffic	0.2 Pa	80 dB
Talking	0.02 Pa	60 dB
Library	0.002 Pa	40 dB
Quiet rural location at night	0.0002 Pa	20 dB
Threshold of hearing	20×10^{-6} Pa	0 dB

Sound power/sound power levels.

Sound Source	Sound Power	Sound Power Level, L_w re 1 picowatt
Jet engine	10,000 W	160 dB
Loudspeaker rock	100 W	140 dB
Pneumatic hammer	1 W	120 dB
Outboard motor	0.01 W	100 dB
Dishwasher	0.0001 W	80 dB
Office	0.000001 W	60 dB
Fridge	0.00000001 W	40 dB
Whisper	0.0000000001 W	20 dB
Threshold	10^{-12} W	0 dB

Acoustic testing at BSRIA

In recent years there has been greater awareness on the importance of noise impact assessments and this is reflected in various product certification schemes currently in operation.

For example acoustic testing is now a mandatory requirement of the EN 14511 and some incentive and quality schemes that call upon EN 12102:2008 for sound power measurement of products such as heat pumps.

The recently completed reverberation chamber at BSRIA provides an acoustic testing facility capable of determining sound power levels for a range of space heating and cooling products.

This is the only thermal acoustic test facility in the country that has the capacity to provide a specific thermal environment enabling acoustic testing to be carried out over a series of parameters. Our specialist conditioning units allow us to fully control the temperature and humidity of the facility and therefore we are able to replicate a range of typical real-life

operational situations in accordance to EN 12102:2008, ISO 3741 and ISO 3743. This means that BSRIA is now able to supply manufacturers with accurate, reliable and relevant data on their products

Sound power levels are provided to manufacturers/consultants, enabling a noise impact assessment to be carried out for a real-life situation. Sound power levels are therefore a useful and practical quantity and as such robust acoustic testing is very important.

For further information visit www.bsria.co.uk

Become a European Building Expert (EurBE)

Members of AEEBC (The Association of European Building Surveyors and Construction Experts) member organisations (which includes CIAT) can now apply for EurBE, a European accreditation scheme for construction and building professionals.

EurBE provides an opportunity for suitably qualified professionals from across Europe to achieve European recognition and accreditation alongside their national qualification. The professional designation 'EurBE' – for European Building Expert – is awarded to candidates who meet the experience and competence requirements of the AEEBC. Applicants are assessed firstly by an AEEBC National Monitoring Committee in the country in which they operate and secondly by an AEEBC European Monitoring Committee.

Professionals who are awarded EurBE will be recognised as having met the AEEBC common European wide threshold standards required of a Building Expert. All individual members of the professional institutions and associations that make up the principal members of the AEEBC are eligible to apply. Assessment is based on academic qualifications, professional experience and commitment to comply with the AEEBC Code of Conduct and Ethics.

Approved EurBEs also become EurBE members of the AEEBC. This gives access to information and network opportunities across the European construction and building sectors.

For further information, please visit www.aeebc.org/eurbe.

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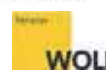
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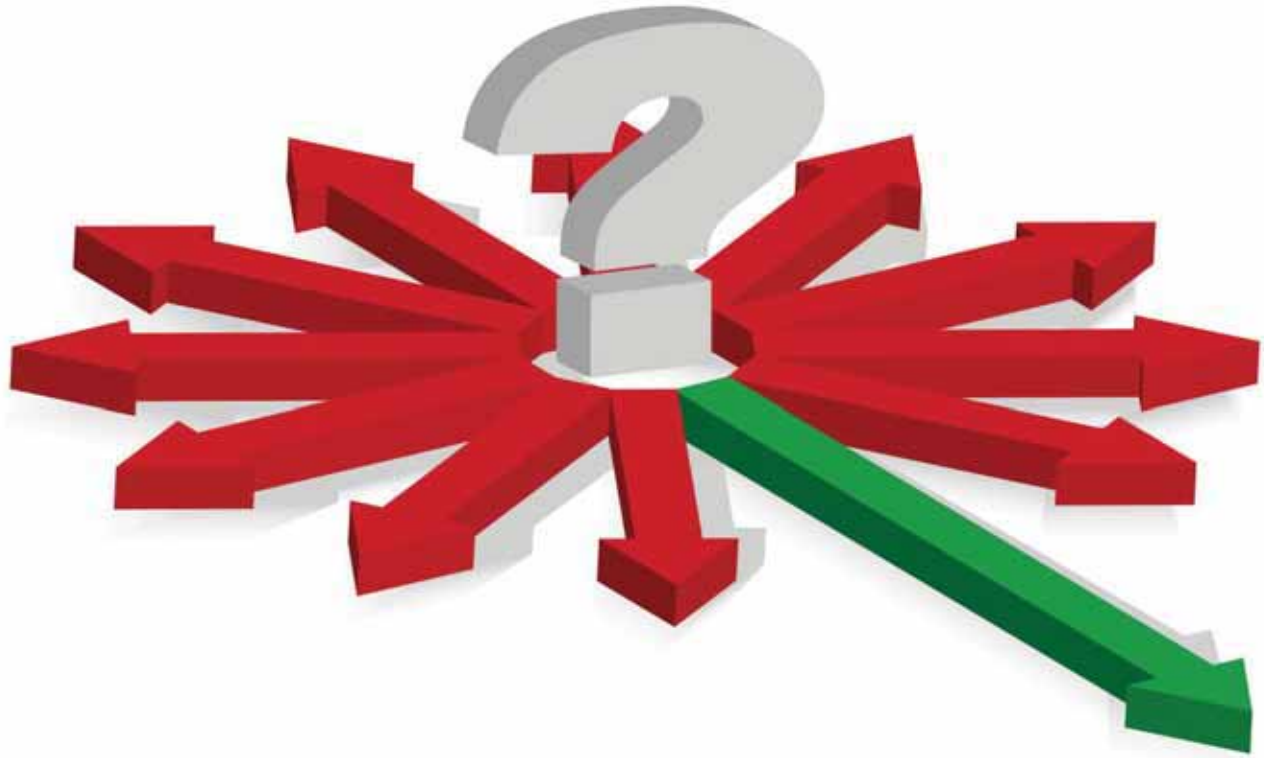
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Membership: the future

CIAT, in common with many professional bodies, is facing major challenges from demographic and economic developments. Professor Sam Allwinkle PPBIAT MCIAT reports on the work being done to ensure the Institute remains fit for the future.



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This article is based upon the deliberations of the Membership Futures Group that was established in 2011 in recognition that CIAT, like many other professional bodies, would be facing unprecedented challenges and needed to plan for future change. It was agreed that a strategic approach was necessary, together with critical reflection and creative vision, if CIAT is to maximise the opportunities in the short, medium and long term and minimise any potential threat to the membership, the discipline and future viability of the Institute.

The remit of this Group is to explore the current membership base and structure and to examine membership trends including demographics, education, practice and qualification, as well as market, political, economic and societal trends. The Group will also explore opportunities and threats, compare and contrast CIAT membership and systems against other professional bodies,

create and test alternative scenarios and options appraisal, and finally publish a report on their findings.

The Group recognises the need to create a clear plan for the future, identifying and understanding the complexity of the problems, and likely consequences of any decisions that are made, whilst avoiding 'quick fixes'.

A holistic perspective will be maintained at all times, set within the context of different time frames, and any proposed solutions will be based upon the best possible data and information and benefitting from the input and experience of CIAT staff and members.

Opportunities for change

These are challenging times for CIAT and its membership, in the midst of an economic downturn and reduced employment, with a higher education system that is being

privatised by stealth; with sustainable environmental policies and legislation growing exponentially, with the impact of the next generation of IT and Building Information Modelling (BIM) on design, construction and use of buildings, and the ever increasing need to 'up-skill' in a fast-changing world.

Fortunately this period offers unprecedented possibilities in the sphere of design and practice, providing CIAT with key opportunities to take a professional lead, improve recognition of the discipline, build a reputation and attract new members.

CIAT is also fortunate that it has forged strong links with universities and that these institutions are successfully creating and developing Architectural Technology as an academic discipline and professional brand at undergraduate and postgraduate level together with research and development.

Challenges for membership

The demographics within the construction industry are skewed, with an ageing workforce at one end and a shrinking younger group at the other. This means professional bodies are likely to become more competitive for members. Also, the supply of graduate and postgraduate students will also need to be carefully observed.

A review of CIAT data, publicly available web sources and reports was undertaken by the Group. This research aimed to demonstrate clearly the impact of demographic change on CIAT by translating the projections of UK population data and the construction workforce over the next 5-15 years. It must be recognised that it is difficult to predict accurately the changes in five, ten and fifteen years, however demographic data tends to provide a relatively accurate picture.

There are positive aspects linked to the different grades of membership. Both the student membership and Associate membership levels are healthy, and very close to the maximum expected. However, the conversion rate to Chartered Membership needs to improve to create a more vibrant Institute.

What can we learn from the other professional bodies within the construction industry in terms of demographics, structures, strategies and plans? Many of these bodies have a broad-base membership with divisions /faculties but few have a singular approach. Many have alternative routes into membership and encourage reciprocity. Some have similar levels of graduates in their subject areas, but have larger intakes into Chartered Membership.

Progressing the agenda

Considerable progress has been made via meetings held with the Regions and Centres the Membership Futures Group and a Focus Group. These deliberations have helped shape and progress tasks and also identify related areas, including 'image and identity' as an area linked to membership and as a membership based organisation succession planning has now been added to the agenda .

Image and identity

The image and identity activities include an assessment of CIAT publications; how to promote the value of Chartered Membership to students and prospective applicants; how CIAT meets the needs of the industry, society and the economy, (particularly in terms of the environment, employability and professional services and branding).

To commence the overhaul of the perception of the Institute, and to engage correctly with the Institute's varied target audiences, a

marketing agency has been appointed to advise CIAT on its branding, and how it can create critical unique selling points, taglines and more easily understood definitions of the Architectural Technology discipline and CIAT membership grades. This exercise will include a review of documentation and modes of communication with industry, individuals and communities of practice.

Succession planning

As CIAT is an organisation for members run by members it is therefore vitally important that succession planning is addressed to maintain continuity and future sustainability against an



There is now an awareness of the underlying problems facing the membership, and the need to increase the number of Chartered Membership levels'

Institutional membership profile that is less than 'business healthy'. It is therefore important to recognise that some positive actions are necessary to encourage new blood and succession planning for the future wellbeing of the Institute. There is also a review being undertaken to determine the contributions made by individual members of CIAT in groups, committees and other areas of work, in order to ascertain the demographic profile of these members. This will be useful for succession planning.

Progressing membership

From the presentations and feedback from members, there is now an awareness of the underlying problems facing the membership, and the need to increase the number of Chartered Members. There is also a growing awareness of the nature and diversity of Architectural Technology and the need to recognise this breadth within our membership .

This was evidenced in the survey of the membership through the different roles and functions, and nature of Architectural Technology roles and functions. The surveys also illustrated that the main barriers in progressing to Chartered Membership are:

- Time taken to qualify
- Membership qualifying process
- Language used in qualifying process

To address these issues, the Membership Futures Group was established to develop an alternative progression route for members and candidates, to join the Institute via a more inclusive and less prescriptive process. The new assessment procedure also takes into account that the discipline is not singular and recognises the diversity of Architectural Technology as an evolving discipline and profession.

The current process and required competences may not be relevant in all cases or fit for purpose for many of those who work in Architectural Technology. As the world of professional work becomes more specialised, the pressure to recognise and embrace specialisation will become an important area for all professional bodies.

There is overwhelming support to change the prescriptive nature of the present system and move towards a performance-based approach that will allow applicants to demonstrate their professional experience in their chosen field of Architectural Technology. Therefore a competence-based method of assessment was developed and a piloting exercise was undertaken during July and August to appraise this system. This method has received a positive response and further pilots are planned to complete this phase by late November.

We still have some distance to travel and I have made it clear to all that this work is not time bound as it is both complex and complicated and we need to avoid arriving at a solution without understanding and/ or identifying the nature of the issues and/or problems, and the potential solutions and their likely cause and effect.

The work that has been completed to date forms an important part of this landscape but we need to undertake further pilot boards to complete this exercise and hopefully this can be done in the next two months and in advance of the AGM.

Following the successful presentation at the 2011 AGM weekend, a presentation will be made at this year's AGM on completion of formal business to provide an update on the progress with this important work and create an open dialogue with the assembled audience.

As Chair, I wish to record my thanks to all staff, members and Regions/Centres for their input and support and for embracing positively with this important initiative in an open and constructive manner and I encourage all members to contribute views and opinions to help shape their future .

Top of the class

The winners of this year's Award for Outstanding Graduating Student talk about what motivates them, why they chose Architectural Technology and what their plans are for the future. By **Dorota Fitzpatrick**, Membership and Education Assistant.

The Outstanding Graduating Student Award recognises those students who in the opinion of a programme leader has worked to the best of his or her ability and put in the greatest effort. It is presented to one student from each of the universities who have received CIAT Accreditation for their BSc (Hons) Architectural Degree programme. The students talked to Dorota Fitzpatrick about their courses and their plans for the future.

Oliver Beasley

University of Salford
BSc (Hons) Architectural Design and Technology

'I chose to study Architectural Design and Technology (ADT) in 2007 following a year's placement in a local architect's practice. I had the option of studying either ADT or architecture but chose ADT due to the scientific nature of the design approach, something which I was more comfortable with due to my previous academic background at school. What has been interesting however is that the more I learnt about the technical design, the more I developed an interest in the other more traditional roles of an architect and developed a passion for all aspects of architecture with a view to gaining a holistic and comprehensive understanding of architectural design.

I was employed throughout the duration of my studies and found this to be both challenging and very rewarding. Despite the obvious difficulties in workload balance, the two complemented one another and I believe that the work produced for each was of a better quality because of it. Now I have graduated, I am working in a newly established small design practice and will be aiming towards studying a masters in 2013, preferably within the Netherlands.'

Course Leader Dr Angela Lee said 'Oliver is an exceptional student. Coincidentally he is also the highest graduating student on the programme and across the entire school. This recognition from CIAT is most deserved'.



Mathias Elle

University of Bolton
BSc (Hons) Architectural Technology

I have always had an interest in architecture and engineering. The Architectural Technology degree at the University of Bolton offered the ideal combination of the two disciplines. I have enjoyed this combination throughout my studies and there has been room for developing both my creative and my technical skills. The University of Bolton particularly excels in interdisciplinary courses and projects, which has helped me to gain a good holistic

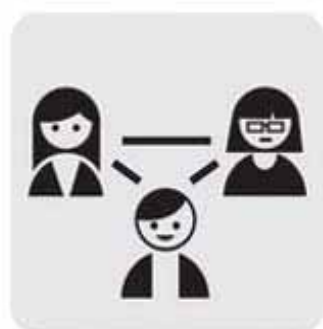


understanding of the industry and the built environment.

I moved to England from Denmark in relation to my studies and besides learning a lot from my degree I have learnt a lot about the English culture and how the building industry operates in England. This has been very interesting and has provided me with a much wider perspective on the industry which I can take with me back to Denmark.

Next year I will begin a Masters Degree at University College London focusing on building and urban design. My degree from the University of Bolton has provided me with an excellent base for my future studies and career.

Course Leader Nooshin Akrami said 'With his research –orientated and methodical approach Mathias has produced creative and technical solutions to design studio projects every year. For his final year Architectural Design Studio module...Mathias created his own brief and worked on the regeneration and redevelopment of Pomona docks in Manchester. Extensive amounts of background work, planning and design have been incorporated into his forward looking, sustainable, mixed-use creative proposal.'



Tracey Gale

Leeds Metropolitan University
BSc (Hons) Architectural Technology

Studying Architecture was an unfulfilled high school dream from over 25 years ago, which I have now achieved with a first class Honours degree in Architectural Technology, a CIAT award for Outstanding Achievement and a Stephen George Foundation Prize for Excellence in the Dissertation. Having worked in various industries I found myself employed in an architect's practice and the time and situation just seemed perfect to pursue the career I had originally set my heart upon. It may have been a challenge, working 30 hours a week and looking after a house and family, but definitely worth the frustrations. Being a student member of CIAT allowed me to attend CPD events and learn about new products, which was extremely useful when I was no longer employed within the industry. Hopefully my path to working in architecture may continue with suitable employment and an opportunity to re-join CIAT and complete my POP Record.



Mark Irwin-Childs

Nottingham Trent University
BSc (Hons) Architectural Technology

Looking back over the four years it's been quite a journey; I remember some of the first seminars learning the very basics of construction. It seems a long time ago. Since then, I along with my class have been taught many aspects of the construction industry, from surveying, to contracts and administration, BIM software, heritage and conservation, planning, detailing, the list seems endless. Having such a wide overview of all elements of the construction industry is what attracted me to this course and why I have found it so enjoyable. I have excelled in the elements of the course that came naturally to me, and worked hard to improve in areas that did not.

The culmination of the three years of university and my placement year boiled down to a final degree presentation- an opportunity to combine ideas and demonstrate many elements of what we learnt during our university experience. Having achieved a first

class degree and this award has made all the months of hard work and the week of late nights in preparation for that show worthwhile. I'm eager to get out into the industry and to make my contribution.

Course Leader Vince Conway MCIAT said: 'Mark has been an exceptional student...(he) successfully transferred the skills and knowledge learned during the placement into his final year project. Mark received further recognition from Ron Muir, the design manager at Balfour Beatty, who sponsored an additional prize and certificate. Ron awarded Mark the first prize for his design of an Aquatic Centre...recognised as the best design for both technical excellence and buildability.'



Martine Rooleid ACIAT

Edinburgh Napier University
BSc (Hons) Architectural Technology

Ever since I was a little child I've been fascinated by how things come together and looked at impressive buildings with awe whenever I had the opportunity. I began my Architectural Technology journey in Estonia by sketching the buildings I saw and pondered how they were constructed.

My actual degree education however started in Denmark, under the name of 'Constructing Architect' and that's where I realised I had found my calling, bridging the gap between architecture and engineering, solving construction issues while keeping a close eye on the design aspect.

The last two years of my education took place here, in the UK, at Edinburgh Napier University and I must say that it has certainly been a

brilliant experience with all the people I met from various backgrounds and all the help and guidance I received from my tutors.

CIAT has also been a tremendous help with useful advice along the way and I am thoroughly grateful for my university and CIAT for awarding me this honour. I will certainly keep on thriving to take on exciting challenges in the future.

Course Leader Robert Mason PPBIAT MCIAT said 'Martine has produced work of an exceptional standard consistently through her two years at Edinburgh Napier University. She is a talented individual who deserves to be recognised by this Award'.

Ciarán Gerard McBennett

University of Ulster
BSc (Hons) Architectural Technology and Management

Achieving a first class Honours in BSc (Hons) Architectural Technology and Management at University of Ulster, winning the CIAT Award for Outstanding Graduating Student and graduating highest in my class are among my greatest achievements to date.

I was driven to excel at university to not only achieve the sense of satisfaction of knowing I had done my best, but also to attain the various Awards offered by CIAT. I was aware of the many long-term academic, career and profile boosting benefits of these Awards and I am exceptionally grateful that CIAT offer such invaluable Awards to emerging graduates.

I enjoyed my years studying at University of Ulster, in particular my final year where I developed an extensive knowledge of sustainability and carbon zero technologies through my dissertation and Northern Ireland Motor Sport Museum project.

In the coming years I do of course aspire to achieve Chartered Membership to further enhance my qualification. I am presently seeking employment with a thriving architectural practice, but when feasible I do aspire to establish my own practice and have a prosperous career in property development. Course Leader Gareth Alexander MCIAT said: 'Ciaran has excelled in the final year with a consistent performance beyond our expectations. The level of interest and enthusiasm he has shown this year is commendable'.

directly onto the second year of the Architectural Design Technology Degree.

The fact my course was Accredited by CIAT gave me confidence that it was a worthwhile qualification. My course gave me a good solid foundation to progress towards becoming a Chartered Architectural Technologist.

My plan for the coming years is to continue on with my studies at Coventry studying a part time MSc in Low Impact Building Performance and Evaluation whilst at the same time gaining real world experience working part time at VB Architects in Kenilworth.

Course Leader Matthew Kinross said of Danny: 'He has been a role model for the younger students and has demonstrated leadership and mentoring in group projects in particular in the disciplined way in which he has approached his work.'



Rachel Pendred

De Montfort University
BSc (Hons) Architectural Design Technology and Production

I chose to study Architectural Technology because I wanted to be involved with the science behind buildings. I have enjoyed working through the many different solutions that can be applied to a range of architectural challenges. I very much enjoyed my studies despite being completely consumed by them and I feel like there's a big hole to fill now that I have finished at university, I'm sure I can fill it with the completion of my Professional and Occupational Performance Record.

My goal now is to become a Chartered Member and eventually head up a successful practice and encourage sustainable architectural solutions.

Course Leader John Stanley said 'Rachel has produced a consistently high performance throughout her time on the course. Last year she produced an outstanding dissertation. The Award is a fitting end to an outstanding academic performance.'



Danny McGough

Coventry University
Architectural Design Technology

It's all been a great finish to my studies with gaining a first class degree in Architectural Design Technology, A Dealey Award for best group/integrated project and now the CIAT Award for Outstanding Student.

Since I was younger I've always been interested in architecture and after spending many years within the industry as a labourer I always had hopes of one day moving up in my career by gaining better qualifications. My studies at Coventry University begun as a 25 year old mature student studying a two year HND in Building which then enabled me to progress





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You are invited to attend the AGM and President's Annual Dinner Dance in Belfast this November, in the city's Titanic centenary year.

This prestigious event in the CIAT calendar brings together in excess of 250 professionals and academics in Architectural Technology and the built environment from across the UK, Republic of Ireland and overseas — an ideal opportunity to meet fellow members and related professionals in the stunning surroundings of the Titanic Belfast Experience.

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Tickets are now available for all events. Dinner Dance tickets are priced at £73.00. For more information and to book please contact Jan Deluxe at CIAT, 397 City Road, London, EC1V 1NH, UK. Tel. +44 (0)20 7278 2206 Fax +44 (0)20 7837 3194. Email: jan@ciat.org.uk

Corporate sponsorship

Sponsorship packages for the event start from £700 and can be tailor-made to suit your requirements. To book a sponsorship package or for a no-obligation discussion, please contact: Hugh Morrison, Communications Director. Tel. +44 (0)20 3286 2201. Email hugh@ciat.org.uk



Photo courtesy of Titanic Belfast

Into thin air?

Does a building lose its airtightness over time? Testers from BSRIA (The Building Services Research and Information Association) tested one of the University of East Anglia's buildings to see what happens to airtightness levels after 14 years of wear and tear.

By **Roderick Bunn**, BSRIA.



The exterior of the Elizabeth Fry building. Opposite: the airtightness test

Does a building lose its airtightness over time? Logic would suggest that it would, as seals deteriorate and differential movement and shrinkage create new air gaps in the fabric. Buildings age, and arguably they should be forgiven if they can't hold their breath as well as they used to.

In any case, is such degradation really that significant? There will always be other reasons for a building's energy consumption to gradually increase. Partial changes of use, ageing building services, and more electrical equipment such as laptops and vending machines all play their part in a gradual reduction in efficiency. It reaches a point where decline in a building's systems can only be arrested by a significant retrofit.

What better way to test this hypothesis than to re-visit one of the exemplar low energy buildings of the 1990s – the Elizabeth Fry Building at the University of East Anglia. The Elizabeth Fry Building was lauded at the time

for being one of the 'best buildings ever,' an epithet coined by Building Services Journal less as a statement of truth and more in relief that a post-occupation evaluation of a building with low energy aspirations seemed to have delivered on its promises. In many ways Elizabeth Fry was the construction industry's 'Higgs Boson' – rare proof that it was possible to build both an energy efficient and highly comfortable and usable building. (The puzzle has been the industry's inability to repeat the exercise on a regular basis, but that's another story.)

To test whether the building's exemplary airtightness has stood the test of time, BSRIA was invited by the University of East Anglia (UEA) and builder Willmott Dixon to conduct an airtightness test nearly 14 years after that carried out for the PROBE series of building revisits.

Elizabeth Fry is a four-storey rectangular building of gross internal area 3250 m² and a treated floor area of 3130 m². Its principal ele-

ventions face almost north onto a main campus road, and south onto a courtyard car park. In 1994, long before airtightness testing was mandated in Part L of the Building Regulations, the building's architects John Miller + Partners and services engineers Fulcrum Consulting set

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In many ways Elizabeth Fry was the construction industry's "Higgs-Boson"

out to optimise thermal insulation and minimise air leakage. The walls were insulated with 200 mm mineral fibre cavity fill, and fitted with tripleglazed, aluminium-clad timber windows with mid-pane blinds. The roof had 300 mm of insulation.

With a design heat loss of only 15 W/m², two 24 kW domestic wall-hung condensing boilers provided all the heat required, with a third in reserve. Heating and cooling is entirely through the mechanical ventilation system and openable windows. Four air-handling units incorporate heat recovery. Two cross-flow units serve the lecture rooms, while more efficient flow-reversing regenerators were used for the offices and seminar rooms. Following initial monitoring, six 200W electric heaters were added in six rooms with exposed floors, corners or roofs.

Even by 2012 standards the building's air leakage index was impressive: the post-completion pressure test came in at 4.2 m³/(h.m²) at 50 Pa. BSRIA's re-test for the PROBE analysis in early 1998 reported a slight deterioration in performance of 6.53 m³/(h.m²). This reduction was attributed to air leakage at the stairwell roof at both ends of the building, an access hatch to the roof, and leakage around windows and door thresholds. Nevertheless, the result still compared extremely well with airtightness standards of the time.

The UEA is leading a European Project, Build with CaRe, to help build capacity to produce low-energy buildings. While the team was exploring the history of Elizabeth Fry and subsequent Termodeck buildings on the UEA campus, it was decided that BSRIA would carry out a third pressure test to find out whether the building had become less airtight over time. This was performed on 18 September 2011, nearly 14 years after the PROBE test.

The test results need to be considered in the context of the building's current use. Since 1998, the uses of some internal areas have changed. The staff and student common rooms on the first and second floors have been converted to offices and seminar rooms. In 2008, the kitchen and dining area on the top floor was converted into a densely-occupied, open plan, post-graduate administrative office. As a consequence the kitchen plant was removed and the extract sealed off.

In summer 2011 the ground floor seminar rooms and their blockwork walls were stripped out to provide an administration centre serving a large number of faculties.

Much to everyone's surprise, the 2011 test revealed the Elizabeth Fry Building to be more airtight than it was in 1998, achieving 5.32 m³/(h.m²) at 50 Pa.

The degradation of door and window seals, plus the deterioration of mastic seals between window frames and the blockwork, might rea-

sonably have led to a higher air leakage rate. But little air leakage was detected. The mastic compriband seals between the cills and the blockwork had fallen apart and this had led to detectable air leakage.

BSRIA believes that the removal of the rooftop kitchen extract plant will have cut out a significant source of leakage. There is also a suspicion that ground floor lecture room ventilation plant may also not have been sealed off in 1998 as effectively as it was in 2011. In 1998, the temporary sealing of the air handling plant relied on the dampers, whereas in 2011 it was sealed with polythene and tape.

The accuracy of the airtightness of the building may be affected by some uncertainty in the envelope area calculations, as these are dependant on the accuracy of the drawings supplied.

Nevertheless, what the air leakage index results show is that 14 years of wear and tear (and changes of use) have not altered Elizabeth Fry's high levels of airtightness. The test results from 1994, 1998 and 2011 can never be totally comparable, as there are many variables:

- the accuracy of the testing equipment (which has improved in the intervening period)

- the degree to which intended openings, such as air handling plant, can be sealed

- and of course changes in the building's use.

The other question is whether Elizabeth Fry's exemplary energy efficiency has continued. Sadly, the building's halo has slipped a little.

Annual energy use in 1997 was 61 kWh/m² for electricity, 33 kWh/m² for gas and 4.2 kWh/m² for domestic hot water. In 2008, electricity consumption rose to 72 kWh/m², but data after that are unreliable owing to metering faults. Gas consumption has risen to 35 kWh/m², plus 11 kWh/m² for domestic hot water that now runs permanently at 55°C (65°C on Sundays). Much of the consumption is thought to be due to standing losses, and some uninsulated pipework.

Lighting and office equipment energy use have gone up owing to the increased occupancy levels. Room occupancy has also increased and the staff and student common rooms on the first and second floors have been turned into offices and seminar rooms. In 1997, the building contained 70 office workstations. In 2010, there were 120.

BSRIA provides airtightness testing and consultancy as part of its package of building compliance services. www.bsria.co.uk



Surprises in store

CIAT-registered practice DLA Architecture designed the new Morrison's Regional Distribution Centre near Bridgwater in Somerset. Practice associate **Jon Brown MCIAT** reports on the design's innovations and consideration for the environment and community.

Supermarket chain Morrison's Regional Distribution Centre forms part of a mixed use masterplan. This self-funded anchor development has been the catalyst for Somerset's North East Bridgwater Regeneration scheme, giving a massive boost to the local economy providing over 1000 new jobs.

The site has a prominent location. Its eastern boundary is immediately adjacent to the M5, to the southern boundary is the 'Willow Man' sculpture, the south's answer to the famous 'Angel of the North'. The local authority aspired for a landmark development, and the design for the Centre was inspired by the local craft of weaving willow and a desire for synergy with the rural surroundings. This resulted in a cost effective elevational cladding treatment that makes a bold statement.

Both the masterplan and the Distribution Centre have common bio-diversity aims. A wildlife corridor has been created along the eastern boundary linking into a 'habitat creation' area in which purpose built newt ponds are found. The landscaping scheme provides a mix of nat-

ural flora and grasses with indigenous trees planted in copse formation. In addition breeding habitats have been created to encourage local species, such as bats, butterflies and birds. The open network of rhynes (drainage ditches) and flood relief channels reinforces the local ecology and was developed in consultation with the Environment Agency and the Internal Drainage Board (a public body under Defra supervision).

The 59 acre site, developed at a cost in excess of £100m, provides a total of 780,000 square feet of Ambient, Chilled, Frozen and Bread Warehouses together with Resource Recycling and Vehicle Maintenance Units. This development was delivered in a fast track 50 week construction period consolidating Morrison's logistic infrastructure. The development has brought economy to the business by reducing fleet mileage, centralising and streamlining all logistical operations.

Throughout the construction process Morrisons and the contractor were in dialogue with local community groups and local council

to immediately address concerns as they arose. This interaction led to the issue of a Considerate Constructors Scheme 'Performance Beyond Compliance' Certificate.

During the design development stage an in-depth study of Morrison's existing RDC sites and the operational and logistical processes was undertaken. Improvements such as flow-through warehousing, energy saving measures, green specification and innovative technologies were identified and administered on the Bridgwater project. This ensured that the build co-ordinated exactly with the end user's bespoke requirement.

A collaborative design development approach ensured that the end user has taken receipt of a development that satisfies today's business function and future proofs foreseen demands. The Distribution Centre started to stock the retail stores from September 2011, such was the background preparation work, the retailers reported that there was a seamless transition in receiving stock from the new distribution centre. Currently the performance of



the development is healthier than anticipated, increased volumes of stock are being distributed to more stores than originally programmed. A Senior Logistics Director has described the facility as 'logistic heaven'.

The planning approval conditioned the RDC development achieve BREEAM 'Very Good' rating, however, due to Morrisons' business-wide objective to reduce its carbon footprint, this target achievement was increased to Excellent with an additional commitment for on-site renewable energy.

The BREEAM Industrial (2008) design stage assessment obtained the target 'Excellent' rating. The Post Construction Report has been submitted and is awaiting certification. Contained within the Assessment is an exemplary performance credit awarded for the choice of major building material specification together with credits for responsible sourcing of materials. BRE approved innovation credit has been awarded for the ozone treatment to the refrigeration plant water supply. Also contributing to the overall score is the provision of major leak detection, building system sub-metering, sanitary shut off, thermal zoning, reduction in CO₂ emissions, LZC (Low and Zero Carbon) Technologies amongst others.

The design team adopted and implemented Morrison's carbon hierarchy of avoiding and reducing energy demand before specifying renewable energy. The anticipated carbon emissions were evaluated and the passive avoidance measures were taken, including the following:

- Ammonia refrigeration rather than conventional HFCs.
- Introduction of optimum natural daylight levels within the warehouses to avoid the need for artificial lighting.
- High air tightness to avoid unnecessary heat loss (3m/(h.m²))@50pa).
- Natural ambient warehouse roof turret ventilation.

The design of the refrigeration system reduces carbon emissions through energy efficient measures:

- Evaporate cooling, treated rainwater harvesting providing more than half of the demand.
- Efficient variable speed compressors/fans.
- Intelligent control system monitoring responding to external conditions, demand and plant performance.

Energy efficient T5 light fittings are specified throughout with innovative LED externally, all controlled using presence detection and day-light measurement interface.

The following renewable technologies were identified as appropriate and implemented:

- Monocrystalline/thin film photovoltaic technologies with an anticipated 5.8% saving of the predicted carbon emissions.

- Refrigeration waste heat recovery system to heat the cold store ceiling void and beneath floor heating mat.
- Warehouse and Transport Office Solar water heating systems.
- Efficient air source heat pump systems for heating and cooling the administration areas.

In addition to the sustainable implementation, Morrisons are promoting carbon awareness to visitor, customers and staff alike by having a dedicated 'green information centre' adjacent to the main entrance. Here each system electronically reports current energy savings.

Overall the project has delivered a technologically innovative and truly sustainable development making a bold statement for Bridgwater whilst being sympathetic to the environment and setting standards for future distribution warehousing.



Top: solar thermal hot water installation.
Below: aerial view of the site.



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A Senior Logistics Director has described the facility as “logistic heaven”

Waste not, want not

Visit CIAT-supported **Resource Ireland** exhibition and see how industry is shaping the future of Ireland's water and waste sectors.

With only a few days until Resource Ireland, momentum is building fast for the leading event for the Irish environment, water, recycling and waste markets. With a varied exhibition floor, outside demonstration area and comprehensive free to attend seminar programme, this event is not to be missed.

Focused on two core themes for 2012 – water and waste, the CIAT-supported exhibition consists of the well established Irish Water Exhibition and the Irish Recycling and Waste Exhibition. With leading suppliers showcasing their products and services, Resource Ireland is the only exhibition you need to attend to stay abreast with developments in the Irish market.

Resource Ireland will also feature two extensive free to attend seminar programmes, bringing together high profile, leading industry experts to offer solutions to the country's biggest water and waste challenges. Providing excellent best practice learning and networking opportunities, Resource Ireland is set to be the most content driven event of the year.

The Waste Theatre, in association with CIWM, stopfoodwaste.ie and foodwaste.ie will explore the latest industry issues and regulations affecting Ireland's waste sector.

Sessions and speakers include:

'End of Waste Criteria – the Nuts and Bolts of how to Achieve End of Waste Status' – with speakers from the Department of Environment and Local Government, Environmental Training Solutions Ltd, Environmental Protection Agency and RPS Consulting Engineers.

Talkback Debate Forum 'Producer Responsibility Initiatives in Ireland' – with speakers from Repak, TRACS, IFFPG and WEEE Ireland.

'Waste Prevention and Minimisation' – with speakers from Environment and Local Government, Environmental Protection Agency, Macroon E and The Rediscovery Centre.

'Experiences of Enforcing the Food Waste Regulations in Dublin' – with a speaker from Dublin City Council.



'Local Authorities and Food Waste Prevention at Events and Festivals' with a speaker from EPA National Waste Prevention Programme.

The Water Theatre will feature key industry speakers who will join together to discuss recent hot topics facing the water industry.

Sessions and speakers include:

'Water Security in Dublin' – including speakers from Dublin City Council and Trinity College Dublin.

'Metering' – with a speaker from AMCS Group
'Flood Management' – with speakers from Office of Public Works, Cork County Council and Chris Baines Associates.

'Septic Tanks' – with speakers from Irish Rural Link and Viltru.

Running for two days, Resource Ireland will attract leading experts in the environmental, water and waste sectors from some of the most influential organisations in the industry, creating the ideal setting for sharing industry knowledge and inspiration.

The last exhibition in 2010 attracted over 1,600 attendees, with major industry names represented. The packed seminar theatres and

busy exhibition floor shows the strength of the water, waste and recycling sectors and the emphasis that more and more companies are placing on sustainability.

Exhibitor Rachel Woodhall from Groundforce said: 'Groundforce, in its third year of exhibiting at Resource Ireland, has enjoyed continuing success during this two-day exhibition. With the opportunity to meet local authorities, civil and environmental contractors, engineering designers and other key decision makers, Groundforce received over fifty new enquiries requesting quotations for hire or sale of equipment that was on display.'

Event Director Donna Bushell explained: 'Resource Ireland brings together the Irish Business leaders and technology providers, this important event places the management of water, waste and recycling at the forefront of the environmental sector. Resource Ireland will once again provide a "one stop shop" for industry to see the latest innovations, hear from thought leaders and network with peers.'

Resource Ireland will be held at Simmonscourt Dublin from 17 – 18 October 2012, for free entry into the exhibition and to attend the seminars, please register at: www.resourceireland.net

The full speaker programme can be found at: www.resourceireland.net/seminars

Exhibition space may be booked by contacting James Boyd.
Tel. +44 (0)1342 332091 or email james.boyd@fav-house.com



Visit the industry
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Join Ireland's Environmental Professionals



irish **RECYCLING**
& **WASTE** exhibition



irish **WATER**
exhibition

Ireland's only exhibition bringing together buyers and suppliers of environmental products and services from water, energy, waste and recycling. Providing information and solutions for a sustainable future for both industry and commerce – you can't afford to miss it.



17-18 October 2012
SIMMONSCOURT DUBLIN

By visiting you can find out about

- + Latest Irish legislation and industry developments
- + Managing water resources
- + How minimising environmental impacts can maximise profits
- + Understanding and solving your waste management challenges

Also at Resource Ireland

- + FREE two day seminar programme covering the water and waste sector
- + Access two leading events, the Irish Water Exhibition and the Irish Recycling & Waste Exhibition
- + Over 80 exhibitors
- + Network with over 1500 industry professionals

For **FREE** entry visit www.resourceireland.net/registernow

The Silver Centre

This year marks the twenty-fifth anniversary of the formation of the Republic of Ireland Centre. **Adam Endacott**, Archivist, looks at the background to that historic event.



Above: presentation of the plaque (right) to commemorate the amalgamation of IAAT and BIAT in 1987. L-R. Jim Kirwan, Centre Chairman, Graham Watts, Chief Executive, Brendan Chawke (plaque designer) and Charles Lehman.

A significant milestone in CIAT's history in January 1987 was the welcoming by the Institute (then BIAT) of nearly 200 new members from the Republic of Ireland; the members of the Institute of Architectural and Associated Technology. IAAT officially amalgamated with BIAT on 1 January into a new Republic of Ireland Centre. The first inaugural meeting of the new Centre was held at the Jury's Hotel in Dublin on 30 January. 54 people attended the meeting, where a committee of twelve were elected with Jim Kirwan as Chairman and Denise Germaine as Secretary. An official launch of the Centre was held later in the year.

The involvement of SAAT (The Society of Architectural and Associated Technicians, CIAT's original name) in the Republic of Ireland began as early as March 1965. Just six weeks after the creation of SAAT, a group of British members visited Dublin to encourage the setting up of an Institute for technicians in Ireland. Several meetings were held between Officers of the Provisional Committee in Ireland for the Institute of Architectural and Associated Technicians and SAAT Officers.

From its inception it had been the wish of Council for technicians in the Republic to form their own Region and Chapters, but in September 1965, the Provisional Committee decided not to adopt this option, having looked at the most effective form of representation.

Months later in May 1966, a general meeting of technicians in Dublin passed a resolution to seek incorporation within the Royal Institute of the Architects in Ireland (RIAI). However this was rejected by the RIAI Council in October. Following the rejection, the group of technicians founded the Institute of Architectural and Associated Technicians, as an independent body on 18 October 1966. It is recorded that immediate contact was made with SAAT for decisions towards 'affiliation or amalgamation.' In 1971, IAAT changed its title to the Institute of Architectural and Associated Technicians.

SAAT next became involved with IAAT in 1980, when the Society gave full recognition to the three year full time Architectural Technician's Diploma at Bolton Street College of Technology in Dublin. This recognition provoked

liaison between SAAT, IAAT and Irish Regional Technical Colleges, resulting in graduate technicians seeking membership of SAAT.

In early 1985, a number of Republic of Ireland members began to enquire about the formation of a Society Centre in the Republic and on 8 October 1985, a provisional Dublin SAAT Action Committee was formed, chaired and co-ordinated by Brian Davies MSAAT. Earlier in April, the President of IAAT, Jim Kirwan, a future President of the Institute, wrote to

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One of the highlights of the Centre's history was hosting the first overseas AGM'

SAAT asking for joint talks to develop a more positive co-operation and liaison between the two institutions.

An initial meeting between SAAT and IAAT was held in February 1986 and throughout the discussions, IAAT became more agreeable to the dissolution of their own Institute, whose membership had been in excess of 800 and had dropped to 185, and in favour of its amalgamation into a Republic of Ireland Centre of SAAT. Following the appropriate actions, it was decided that IAAT be absorbed into BIAT and existing IAAT members be transferred on a grade-for-grade basis into a new BIAT Republic of Ireland Centre.

On 29 May, President Charles Lehman was on hand for the official opening of the Republic of Ireland Centre at the Royal Dublin Hotel. Jim Kirwan, the first Chairman of the Centre presented Charles with a bronze plaque to commemorate the amalgamation of the two Institutes. The plaque had been designed by Brendan Chawke MBIAT and cast by the Dublin Art Foundry.

Thus began a quarter century of CIAT representation and we look forward to the continued close relationship between members in the Republic of Ireland, the UK and overseas.

*Taken from 40 Years On, the official history of CIAT, available to purchase from Central Office.
Additional reporting by Denise Germaine MCIAT, Republic of Ireland Centre Councillor and Chairman.*



Left: Neil Dransfield welcomes Noel Treacy TD to the 2000 Conference in Dublin.



Below: the top table at the Centre's inaugural meeting. L-R. Graham Watts, Charles Lehman, Jim Kirwan and Denise Germaine.



25 years of service in the Republic of Ireland

Following its very successful launch in **1987**, Centre 02 has made its presence known in the Republic of Ireland. By networking, making submissions to government and publicising its existence in the construction industry, it has gradually increased the status of the Architectural Technology profession and the Institute. Here are some of the Centre's achievements over the last 25 years:

In **1995**, its Centre Secretary, Denise Germaine was appointed by the Minister for the Environment to the Building Regulations Advisory Body. CIAT has subsequently been invited to put forward nominations for membership of this prestigious and influential body for each term of office, and Denise continues to fill this position.

In **2000**, the Millennium Year, the Centre hosted the first CIAT international two day Technical Conference, in Dublin Castle Conference Centre. The conference was officially opened by Eamonn Ryan TD and there was a formal reception, hosted by Noel Treacy TD, Minister of Science and Technology in Dublin Castle itself, followed by the AGM and President's Dinner Dance the next day.

In **2006**, the Centre was invited to speak on behalf of Architectural Technologists at an *Oireachtas* Committee hearing on the proposed Building Control Bill and several of the Institute's suggestions to protect the title and professional activities of its members were incorporated in the Bill, which was enacted in 2007.

In November **2006**, CIAT participated in a major conference on the future of Architectural Technology in Ireland, organised by DIT (Dublin Institute of Technology).

In October **2007**, CIAT held its own major conference on Architectural Technology in the Royal Dublin Society.

In **2011**, CIAT speakers participated in the International Conference on Architectural Technology held in DIT, Dublin.

There are now six colleges offering degree courses in Architectural Technology in Ireland, and two of the colleges have applied for CIAT Accreditation, which are in the process of evaluation.

Several Centre members have achieved high office within CIAT, with Jim Kirwan being elected President in **2007**. There are over 60 registered CIAT practices in the Republic of Ireland.

Irish construction projects have competed successfully in the CIAT Award for Technical Excellence in Architectural Technology, with the Galway Clinic by CCH Architects being awarded first prize in **2004**.

As a significant stakeholder, the Republic of Ireland Centre is consulted by Irish government departments on all relevant draft legislation and has endlessly campaigned for equal status for Chartered Architectural Technologists with the other professions in the construction industry.

Institute News

Election results

On 1 September, Council elected three members to senior posts in the Institute. Here they give their reactions on their new posts and outline some of their ambitions while in office.

Karl Grace MCIAT
President Elect



I am delighted and proud to have been elected as President Elect and am looking forward to taking up the post in November.

I am pleased at the positive response to my presentation from Council and the feedback on some of my ideas and I look forward to developing these strategic issues.

I am particularly keen to encourage members to get actively involved in their Regions and Centres or committees and groups and for their ideas to be explored within their local network also before bringing them to Central Office. We also have our various on-line forums for extended discussions or for particular issues such as BIM.

One of the issues affecting us and our fellow Institutes is the membership demographics and I am particularly encouraged that there is no shortage of new and enthused members with views and passion about our Institute and industry. We must capture this enthusiasm and provide them with an opportunity to get involved in the areas they are interested in; as they will be the leaders of the discipline before we know it.

'There is no shortage of new and enthused members with views and passion'

Kevin Crawford MCIAT
Vice President Technical



It is a great honour to have been elected. I can't wait to get started after the AGM in November this year and carry on the sterling work of my predecessor. For the next two years at least, I will

be part of the team who has helped to raise the profile of Architectural Technology to the level it is currently at and hopefully be part of the team who raises it higher.

Chartered Architectural Technologists can and do lead. We should not lament our small numbers relative to our allied professions. We know how to creatively, technically, and cost-effectively solve problems. Our technical expertise should be the benchmark of which others should aspire to.

Robert Kay MBE PPBIAT MCIAT
Honorary Treasurer



I was honoured and delighted to be re-elected as Honorary Treasurer by Council.

I will continue, together with the Finance Committee and Council, to endeavour to move the Institute forward both nationally and overseas, enabling members to receive continuing support from Central Office with no reduction in service.

In these difficult economic times, the Institute requires continuing steady leadership, and over the next two years I will endeavour to carry this out together with the President and members of council.

CIAT pledges further support for African energy project

The Institute has pledged further support for charity Practical Action in its work with a micro-hydro energy project in Southern Africa. The Institute enjoys a long-standing relationship with Practical Action as part of its Climate Change Policy to provide a carbon offset programme for Institute travel.

CIAT has pledged £3500 to help fund Catalysing Modern Energy Services, following a similar amount pledged last year. This project seeks to improve energy access through community managed micro-hydro systems. Micro-hydro power is the small-scale harnessing of energy from falling water, such as steep mountain rivers. The project will benefit some of the poorest parts of Malawi, Mozambique and Zimbabwe.

Colin Orr PCIAT said 'I am pleased that the Institute continues to support such worthy projects through its working relationship with Practical Action. It is vital to promote technical construction skills, particularly in developing countries'.

Matt Wenham, head of fundraising for Practical Action said: 'CIAT is helping people access education, healthcare and improving the lives of thousands of people in some of the most remote areas of southern Africa'.

Safety first

Colin Orr PCIAT was invited by the Association for Project Safety (APS) to present their Student Award in September. The winner was Eoin O'Shea ACIAT, a graduate from the CIAT-Accredited BSc (Hons) Architectural Technology and Management degree at the University of Ulster.



Do we have your current email address?

If not please email info@ciat.org.uk.

An up-to-date address ensures you receive the latest information.

Membership News

POP Workshops

Find out how to complete your Professional and Occupational Performance (POP) Record on 19 October 2012 at CIAT Central Office, London, and on 16 November 2012 at the Europa Hotel, Belfast. Please email membership@ciat.org.uk to register your interest in attending.

The qualifying process

Whether you are at the POP Record stage or are unsure about the Professional Practice interview then visit www.youtube.com/ciatechnologist to watch videos to assist you in membership progression. Once you have watched them you can download all the relevant POP Record information and guidance documentation which include completed example units. These can be found at: www.ciat.org.uk/en/members_only/pop_record_downloads.cfm

CIAT Hub on LinkedIn

CIAT's Member Hub has branched out from Twitter to LinkedIn. It is an active forum for members to discuss varying topics with their peers. Search CIAT Hub on LinkedIn and request to join.

Institution of Fire Engineers (IFE)

CIAT and RIBA are shortly to enter into a Memorandum of Understanding with the IFE, which will encourage joint initiatives, which might include joint conferences and seminars, training courses, the development and provision of

guidance documents and similar material and articles in the respective journals and membership newsletters.

The agreement will recognise the different but complimentary specialisms of the professional bodies, but will not necessarily seek shared or joint membership.

POP Panels

Two POP Panels were recently held with seventeen members passing and ten deferrals.

New Members

We are delighted to congratulate the following individuals on obtaining Chartered Membership, MCIAT:

021854 Kemi Adeyeye, Sussex (Region 10)
014978 Gareth Alexander, Antrim (Region 15)
020110 Ian Bateman, Durham (Region 01)
011031 Tony Bechelet, Jersey (Region 11)
018743 Brian Belton, Norfolk (Region 07)
017613 Ian Birchall, Manchester (Region 03)
018220 Lewis Black, Yorkshire (Region 02)
021811 Michael Braband, Gloucs (Region 06)
014409 Mark Campbell, Antrim (Region 15)
025610 Garry Campion, Northants (Region 08)
019699 Boris Ceranic, Derbyshire (Region 04)
019799 Vincent Conway, Notts (Region 04)
033483 Malcolm Davies, Clwyd (Region 16)
019183 Kurosh Dibajatababai, Iran (Region 00)
018376 David Evans, Yorkshire (Region 02)
023000 Alex Field, Wrexham (Region 16)
026967 Bernard Gray, London (Region 09)
014915 Simon Guest, Dorset (Region 12)
018622 Mike Hetherington, Cleveland (Region 01)

017640 Jennifer Hardi, Herts (Region 08)
022387 Gareth Hickman, Salop (Region 05)
023646 Stephen Knightley, Cornwall (Region 12)
025808 Tim Lee, Hertfordshire (Region 08)
017173 Martin Lewis, Norfolk (Region 07)
024578 Vondolson Mapp, St Vincent (Region 00)
021764 John O'Sullivan, Australia (Region 00)
016769 Sarah Radif, Hampshire (Region 10)
014072 Jim Sheridan, Sligo (Centre 02)
018621 Adrian Taylor, Yorkshire (Region 02)
021735 Mark Wildish, Warks (Region 05)
020900 Richard Wilkinson, Hong Kong (Centre 01)

Additionally we extend a warm welcome back to the following Chartered Members who have rejoined the Institute:

017142 Ian Crockard, Down (Region 15)
010192 Barry Lawrence, Kent (Region 10)
012806 MAK Tat Man, Hong Kong (Centre 01)

Congratulations to the following individuals on obtaining Architectural Technician membership, TCIAT.

017994 Lorraine Compton, Kent (Region 10)
017979 Gary Edwards, Bucks (Region 08)
023625 Amy Hines, Yorkshire (Region 02)
025762 Thomas Scott, Suffolk (Region 07)
023020 Jeremy Thurlby, Herts (Region 08)

In memoriam

We regret to announce the death of the following member:

David Steed MCIAT, Bristol (Region 06)

Region and Centre News

Yorkshire Region 02

10 October. Legal Update. Rob Langley returns to provide an update on the latest legal issues affecting the construction industry. It will be held at Holiday Inn, Garforth (M1 J46 A63 Garforth 1 mile on roundabout), 7:00 for 7:30pm. Coffee and muffins provided.

24 October. Sheffield Hallam University – Alumni Event. Cath Basilio will deliver a seminar entitled 'Green Roofs: Adding Value' by Design. 6.30pm for 7.00pm start.

6 November. Retrofit Challenge – a seminar by Kingspan. On improving the energy efficiency in existing buildings to ensure a long lasting, sustainable refurbishment.

To be held at Holiday Inn, Wakefield (M1 J40 towards Wakefield ¼ mile on right). 7.00pm for 7.30pm. Coffee and muffins provided.

For more information on all events please contact Regional CPD Officer Richard Turner MCIAT. Tel 01484 424008
Email richard@farrarbamforth.co.uk

Northern Ireland Region 15

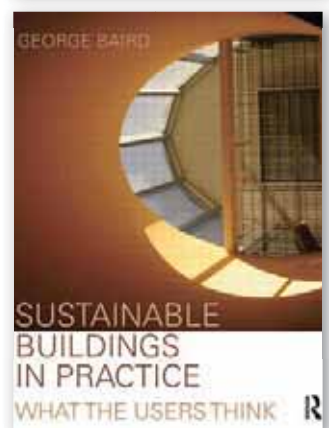
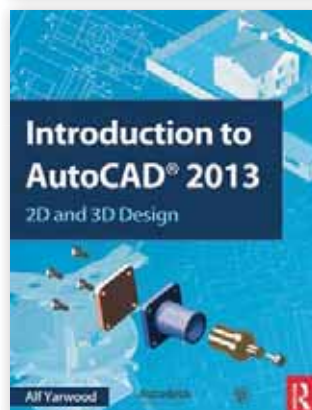
Region 15 is hosting this year's AGM and President's Annual Dinner Dance in Belfast this November. Be part of the event! This prestigious event in the CIAT calendar brings together in excess of 250 professionals and academics in Architectural Technology and the



built environment from across the UK, Republic of Ireland and overseas – an ideal opportunity to meet fellow members and related professionals in the stunning surroundings of the Titanic Belfast Experience.

For more information, please see page 15.

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Building Services



The CIBSE Conference & Exhibition
10-11 October 2012, London Olympia, UK

It's not too late to attend THE industry event of the year...

Don't miss out on joining us at this year's **annual CIBSE Conference**, book your place at **www.buildingserviceevent.com**.

Alternatively register on the day when you attend **Building Services – The CIBSE Conference & Exhibition**. To register on-site, simply visit the Conference Registration Desk at London Olympia, located just steps away from the main entrance of the Grand Hall.

This year's **annual CIBSE Conference** will feature **40+ internationally recognised expert speakers** who will present on sessions including the impending launch of the **Green Deal, BIM, Soft Landings, passive retrofit** and **funding** as well as the delivery of the **Games 2012 venues**.

Attendees include senior professionals from a range of organisations such as building services and architecture practices, client organisations and academia. Don't miss your chance to meet with key decision makers from the likes of **AECOM, the Department of Energy and Climate Change, Max Fordham LLP, Wellcome Trust, Cundall, Edward Cullinan Architects, Balfour Beatty and Hoare Lea & Partners** and more...



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