



A study in success

Student Award winners

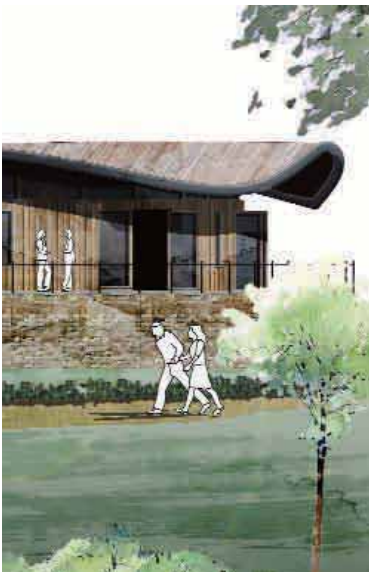


Chartered Institute of
Architectural Technologists

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Cover

This issue's cover shows Maggie's Centre, a hypothetical project for Nottingham University Hospital by Emma Walshaw ACIAT, which received Highly Commended in the 2011 Student Award. The project was designed to be used as a non-residential support centre for cancer patients and their families and friends. For the full story please see page 11.

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**The Chartered Institute of
Architectural Technologists**
397 City Road London EC1V 1NH UK
Tel. +44(0)20 7278 2206
Fax. +44(0)20 7837 3194
info@ciat.org.uk
www.ciat.org.uk

Chief Executive
Francesca Berriman

Editor
Hugh Morrison
editorial@ciat.org.uk

Advertising
advertising@ciat.org.uk

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Institute news



High praise: CIAT Award presentation for Belfast church

On 7 February, the President and Vice-President Technical made a presentation to Hall Black Douglas who received Highly Commended in the Technical Excellence Award for 2011 for Dunmurry Presbyterian Church, Belfast. John Murphy MCIAT on behalf of Hall Black Douglas received the plaque, certificate and cheque, and CIAT representatives were given a tour by Hall Black Douglas staff and church members. Picture shows (l-r) John Murphy MCIAT, Andrew Scott MCIAT, Vice President Technical, Colin Orr PCIAT MCIAT, President.

For a full report on the Award, please see the January/February issue of AT (available to download online at www.ciat.org.uk)

Part G information sheet

Information sheets on Part G of the Building Regulations, which sets out requirements and technical guidance related to the safety and use of water in buildings, are now available to members. The information sheets may be downloaded from the Practice Resources section at www.ciat.org.uk, or ordered free of charge from Donna Chappell at Central Office Tel. +44 (0)20 7278 2206.

Logos for CAD

The Institute is pleased to inform Chartered Members on the Practice Register, that the logo is now available in .dwg and .dxf format for inclusion on drawings and documents produced in a CAD format. If you would like either format sent to you, please email donna@ciat.org.uk quoting your logo licence reference.

New blog for President

CIAT President Colin Orr has launched a blog to keep members informed of his activities during his Presidency. Starting the record with a report of his recent visit to Northern Ireland Region (15), Colin said 'As an Institute, we are

always looking at new ways to engage with all the membership, and fellow professionals within the built environment, and as President, I have now turned my hand to blog writing!

'This is a time of change and opportunity and I look forward to updating my blog on my activities, views and Institute matters. Most importantly, I want to hear from you so please make comment, send me an email or simply follow this blog.' The blog can be found at <http://ciatpresident.blogspot.com/>



Keep up to date with Twitter

If you are a CIAT member and use Twitter, the online social networking and microblogging service, then keep up to date by following CIAT's tweets at @ciatechnologist. The Institute also has discussion groups on LinkedIn, Facebook and a website forum at www.ciat.org.uk.

Please note that for answers to questions about the Institute and membership in general (rather than discussion with other members), it is best to contact the relevant department at Central Office directly.

New FAQs

The Institute's list of Frequently Asked Questions has recently been updated. The list can be found at www.ciat.org.uk/en/faq/index.cfm

Correction

In the article 'Let the Rain Take the Strain' in AT issue 98, we mistakenly referred to Rainharvesting Systems Ltd as Rainwater Harvesting Systems. These companies are not connected. We apologise for this error.

CIAT Awards now open

Entries are now open for the 2012 Open Award for Technical Excellence, the Institute's premier award with prizes of up to £1500, and the Alan King Award for smaller projects. For full details please see the entry forms enclosed with this issue. The picture shows the winning entry in the 2011 Alan King Award.

If you have not received an entry form, please contact Central Office (tel +44 (0)20 7278 2206, email info@ciat.org.uk) or download from www.ciat.org.uk/en/awards/





CIAT members in a scene from *The Professional Practice Interview*

Lights...camera...CIAT!

CIAT's qualifying films can now be viewed online. They are:

Qualifying in Architectural Technology Part One: The Professional Occupational Performance (POP) Record

Qualifying in Architectural Technology Part Two: The Professional Practice Interview

Why join the Chartered Institute of Architectural Technologists?

To view or download, visit our YouTube channel at www.youtube.com/ciatechnologist.

Regional news and events

Yorkshire Region (02)

24 April. Planning Update.

Presentation by Dave Hickling of Hickling Gray Associates on the latest planning issues at the Half Moon, Elloughton, East Riding. 7:00pm for 7:30pm. Buffet supper provided.

15 May. Building Information Modelling

Presentation by Paul Woddy of Building Information Model Consulting Ltd (for more information see www.revitguru.com) It will be preceded by a short Annual Business Meeting to be held at the Holiday Inn, Garforth 6:30pm for 7:00pm (note earlier start). Coffee and muffins provided. Please do not be put off by the ABM, it will not take long and you will not be co-opted onto the committee unless you wish to volunteer.

To attend either event, please reply to Richard Turner Regional CPD Officer. Tel +44 (0)1484 424008. Email richard@farrarbamforth.co.uk

Scotland West (13)

There will be a lunchtime POP Record Workshop at Inverness College UHI on Tuesday 24 April 2012. To reserve a place, please contact James Banks, Membership Director. Email james@ciat.org.uk

Republic of Ireland Centre (2)

BIM in Ireland: feedback from first workshop

CITA (Construction IT Alliance), in conjunction with all the main construction institutions in Ireland, is hosting a series of Building Information Modelling workshops in 2012. The first workshop was held on 1 February and featured David Philp of the UK Cabinet Office presenting the keynote address, which was focused on formulating BIM Policy.

Footage and reports from the event are available to view and download at: www.ciat.org.uk/en/news_and_events/index.cfm/bimfilm

Membership facts and figures

Welcome to new Members

A Professional Practice Interview Board was held in London. We are delighted to congratulate the following people on obtaining Chartered Membership, MCIAT:

016412 Nigel Coates, Bristol (Region 06)
019463 Amardeep Bharj, West Midlands (Region 05)
023458 Louise Grimes, Greater Manchester (Region 03)
024831 Daniel Lacey, Nottinghamshire (Region 04)

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

006474 John Reeves, West Midlands (Region 05)
009880 Peter Morgan, County Antrim (Region 15)
010117 Catherine Hardcastle, Hampshire (Region 10)
017099 Valton Brown, Derbyshire (Region 04)
017535 Jon Wyslon, Cheshire (Region 03)

New Technician Members

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

016477 Garikai Mudywa, Surrey (Region 10)
022346 Lee Matthews, Devon (Region 12)
023713 Kerry Peters, Norfolk (Region 07)
025491 Darren Mayne, Devon (Region 12)

Lapsed members

392 paying members were lapsed in 2011/12 for non-payment of their annual subscription. This compares to 345 in 2010/11 and 390 in 2009/10.

In memoriam

We regret to announce the deaths of the following members:

Keith Grainger MCIAT, Dorset (Region 12)
Bruce Hill MCIAT, Aberdeenshire (Region 14)
David Beveridge MCIAT, Midlothian (Region 14)

Record number of student members

The Institute recently enjoyed a record number of student members, which peaked at 3,043 on 9 January 2012.

POP Panels

Two POP Panels were recently held with thirteen members passing and thirteen deferments. Those members who have passed can either apply for their Professional Practice Interview or upgrade to Technician membership, dependant on what POP Record they had assessed. Those who were deferred will be submitting additional evidence for re-assessment.

POP across the country

In January and February the Membership Department hosted POP Record Workshops in Bath, Brighton, Newquay, Northampton and Plymouth, as well as a visit to DLA Architecture in Wakefield to discuss the qualifying process.

Visits were also made to following Accredited universities: Coventry University, The University of Plymouth, The University of Salford, The University of the West of England, University of Brighton and University of Northampton. CIAT representatives spoke to the students about their future careers in the industry and the progression of their membership once they have graduated.

2012/13 subscriptions notices

Look out for your 2012/13 subscription notice, which will be sent to you under separate cover, as applicable.

Elections for CIAT honorary positions



Chartered Institute of
Architectural Technologists

The following honorary positions are open for election by secret ballot at the Council Meeting to be held on 1 September 2012.

- **President Elect**
- **Vice President Technical**

President Elect

This role is for one year prior to the position of President (a two year position). The role provides the elected Member the opportunity to gain an insight into the role and function of the President, as well as the operation of the Institute. The position takes effect from the close of business at the 2012 AGM, to be hosted in November by the Northern Ireland Region.

Following approval by Council in September 2013, the President Elect will become President from the close of business at the 2013 AGM.

Honorary Treasurer

The role of the Honorary Treasurer is as Chairman of the Finance Committee. The Finance Committee advises on the financial matters relating to the Institute business and makes recommendations for coordinating effort and finances to the Executive Board.

Vice President Technical

The Vice President Technical chairs the Taskforces which address the technical issues relevant to the Institute, which ensure the maintenance and improvement of standards within the built environment. This embraces current issues and technical Awards.

Guidelines

Nominations must be received by the returning officer no later than Friday 8 June 2012. Any Chartered Member is eligible to propose a candidate. Nominations must have the prior consent of the nominee.

Any Chartered Member is eligible to stand. The returning office is the Chief Executive, Francesca Berriman, who will:

- Invite the nominees formally to accept or reject the nomination, and to prepare a manifesto for publication in *AT* magazine.
- Prepare a final list of accepted nominations and despatch it to all members of Council prior to the meeting.
- Invite all those who have accepted nominations to attend the Council meeting for that item of business.

For further information on what the posts will involve, please contact CIAT. Nominated candidates will be profiled in the July/ August edition of *AT*. Please note that both positions include automatic election to Council and Executive Board.

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A study in success

CIAT presented its Student Award for Technical Excellence in Architectural Technology at the Presidents' Dinner Dance last November. Public Relations Director Adam Endacott caught up with the recipients and found out what makes their work so outstanding.



Winner

Reuben Davies ACIAT for Duddridge Modus Centre

Meeting last year's Student Award winner in an ancient wood seemed a rather strange setting for an interview but upon arriving it all began to make sense. I was meeting an inspiring and forward thinking Trainee Architectural Technologist, based in the heart of Lincolnshire, who will certainly be a future role model for the discipline.

Reuben Davies ACIAT, 23, won the Student Award for 2011 with a hypothetical project based around the redevelopment of the National Water Sports Centre (NWSC) in the south of Nottingham. The project's main aim was to rejuvenate the site both from an economic and environmental standpoint.

Since graduating from Nottingham Trent University in 2011, Reuben has been working

in a twelve month internship as part of a design team specialising in sustainable building, retrofits and refurbishments, based at Hill Holt Wood at Norton Disney, Lincolnshire.

How do you feel about winning the Award?

Very humble indeed but extremely grateful! I'm still in shock and to have also received the Institute's Outstanding Graduating Student Award it was certainly a great final year for me and I have achieved the ultimate goal in my career as a student. This is a very proud achievement.

What was the greatest challenge you faced within the winning project?

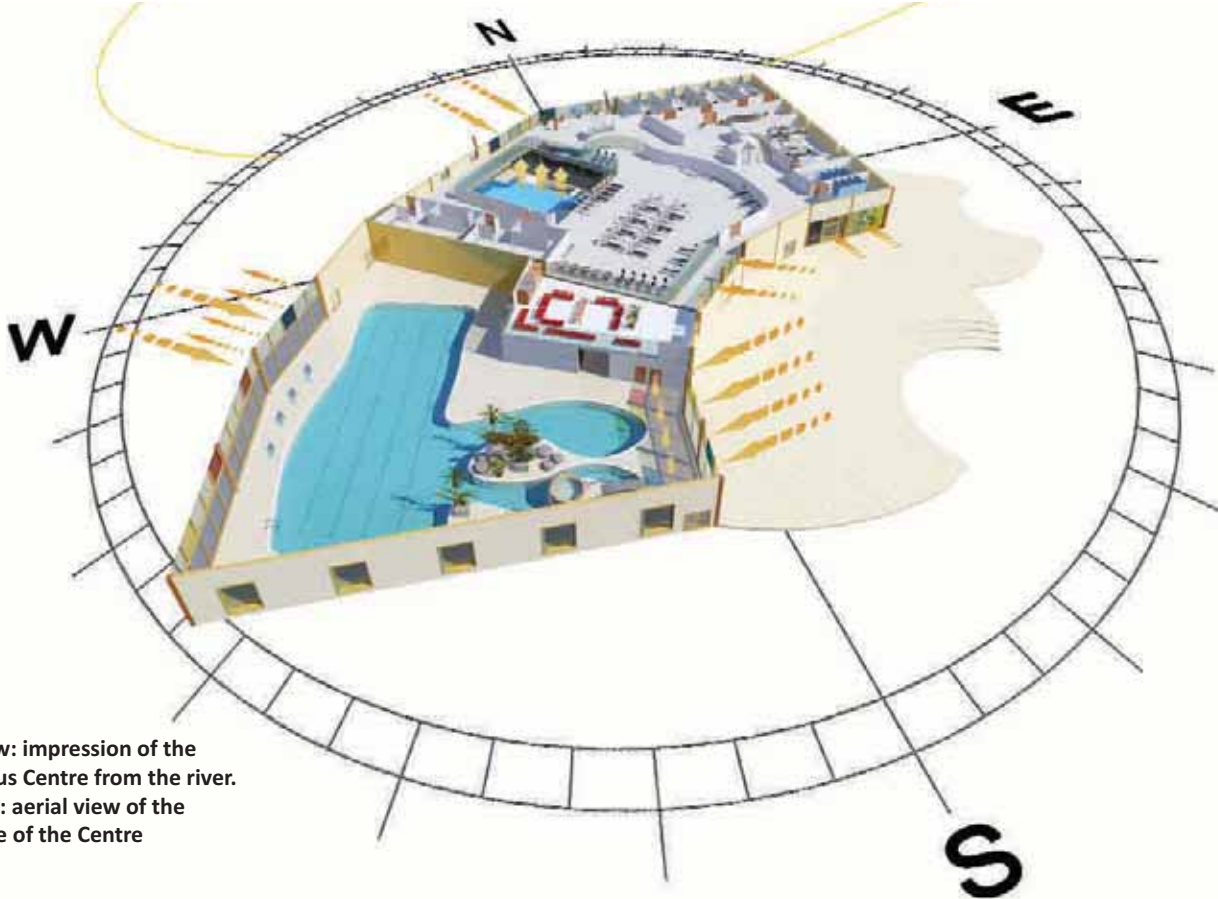
I think understanding how all the systems related into each other was the greatest

challenge particularly the bio metric system; achieving how waste from one is the food for another. The green roof system for the rainwater was also a real challenge to detail including the whole filter system. As a Trainee Architectural Technologist, I'm a technical specialist and sharp on the detailing.

What part of the winning project are you most proud of?

Even though the project was all hypothetical, I was able to create a BREAAAM (the design and assessment method for sustainable buildings) 'excellent' rating which meant that my project is definitely buildable. I also focused on the community on a large scale, not just on the project, so that it is a benchmark building which excels for the environment and its surroundings.





Below: impression of the Modus Centre from the river.
Right: aerial view of the inside of the Centre

What are the main considerations you take into account when working on any project?

Sustainability is fundamental in any project... I'm keen to avoid sustainability in its generic sense but actually get into its core and achieve the truest sustainable creativity. My passion is to find the simplest yet best solution to a problem — simple is the best and what results from it. Architectural Technology puts the importance back into the true fundamentals of a good project.

Do you think the project, if it were built, would stand the test of time?

I hope so; I designed it to be long lasting. It is all self sufficient and this will sustain the project in the long term. There is a bio-mass boiler and the ability to provide its fuel source. I've used timber in this project and I'm a big advocate of timber frame building; it is a great source of structural integrity.

The Award is for technical excellence — is this something you always strive to achieve?

As a Trainee Architectural Technologist, this is at the core of my ability and working environment. The creativity is found in the detailing where technical excellence is found, finding the technical solution even to the smallest problem.

What are you doing now having graduated from university?

I'm a ranger — sounds like something out of the Wild West doesn't it — for the design team based in this woodland. I get to do a bit of everything from teaching through to actual onsite building. I've a few projects outside of the wood which include community based projects and housing associations. It is a great experience and I can really put my skills to use. I'm very proud to be an Architectural Technologist and am the first one to be based

here. It has been back to basics for me, including building my own accommodation, but it is great for the hands-on experience and being able to build your own accommodation, especially coming from a technical background. I get to experiment with building and test out alternatives.

Where do you see yourself in the future?

I'm pushing myself to become a Chartered Member of CIAT which is a career goal for me in the future. I'd like to work abroad possibly in Australia or New Zealand and one day would like to run my own practice. During my studies, I had a year in practice and this really helped with the work mindset and to understand the working environment.

Reuben received a trophy, certificate and cheque for £750.



Technical focus: Dudderidge Modus Centre

Construction Design Technology

The project integrated design technology through the building fabric selection and the methods employed to construct the elements. The use of Glulam and JJI Hybrid joists in the primary and secondary structures allowed for a simple and yet sustainable construction through the use of certified timbers from responsible sources. The use of Novacem (Carbon Negative Cement) and recycled plastic void formers are another simple example of integrated design technology which has reduced the impact of the development on all levels.

Technical Performance

Selecting building elements which were both responsive and proven performers was a fundamental requirement during the design and detailing stages. The materials suggested for the project design would need to have special properties in certain instances and in all cases form recognised solutions to improve the realistic buildability of the development. The choice of Warmcel Cellulose Fibre Thermal Insulation is a solid example of balancing technical performance with the project ethos; it provides outstanding thermal properties as an insulator, and is produced from 100% recycled paper. It also works extremely well with timber frame buildings and airtight developments.

Integrated Health and Safety

Unfortunately no design risk diary or CDM Red, Amber and Green system was adopted during the design stage of this development. However the project was designed with health and safety consciously in mind with a Design and Access statement.

Sustainability

Sustainability is a term which has lost its impetus and its meaning when taken in relation to a

design project, the overuse and misguided understanding of the term is an aspect which this development was keen to avoid. From the primary stage of demolishing the existing buildings, sustainability was integrated; eg, specifying that the waste from the demolition could be used for the new floor slab and also as an alternative substrate for the proposed green roof.

The project took the approach of minimal impact and high environmental performance throughout the design process; selecting rain water harvesting, biomass and ground source heating, hydro power micro-generation, reed-bed drainage, heat recovery, water and air cooling, simple passive design techniques and community scale transport to ensure the simple and principal requirements of a continued sustenance of building performance.

'Buildability'

The realism of the design in a construction context was also a vital design principle; the ability of a design to recognise 'buildability' from the earliest stages is a personal belief and one which is reflected in this project. The simple forms and rationale adopted within the building lead to an ability to detail the Centre to a level of complex understanding, the techniques and systems implemented also provided an effective means of building knowledge.

Evidence of life cycle costings and assessment

Although no direct life cycle costing assessment was carried out on the project, the fabric selection was based on a balance of performance which included the suggested life cycle of the materials and the renewable systems integrated were suggested on the basis of their payback periods from simple payback calculations.

EPC/BREEAM

Through integrated learning modules the project was able to be assessed using recognised energy performance standards; the buildings EPC was

calculated using the SBEM software and the design was also BREEAM tested in an accurate but hypothetical situation. The ability to use these assessment procedures allowed the influence of the results on the design process, amending and including further design features to improve the development performance; the building achieved an EPC energy efficiency rating of 5 and a BREEAM rating of 'Excellent'.

'An excellent design that embraced the principles of Architectural Technology'

Innovation

Innovation in design was sought from the earliest stages, forming a project brief requirement. The Dudderidge Modus Centre was developed with related closed-loop systems continually in mind, aiming to integrate methods and processes to one another through the use of one system's waste as another's fuel; this is the method which governs the natural world and allows ecosystems in nature to develop in balance. Evidence of this can be seen in the use of MVHR (Mechanical Ventilation Heat Recovery), biomass fertiliser from reed-bed waste and water filtration from natural septic tanks.

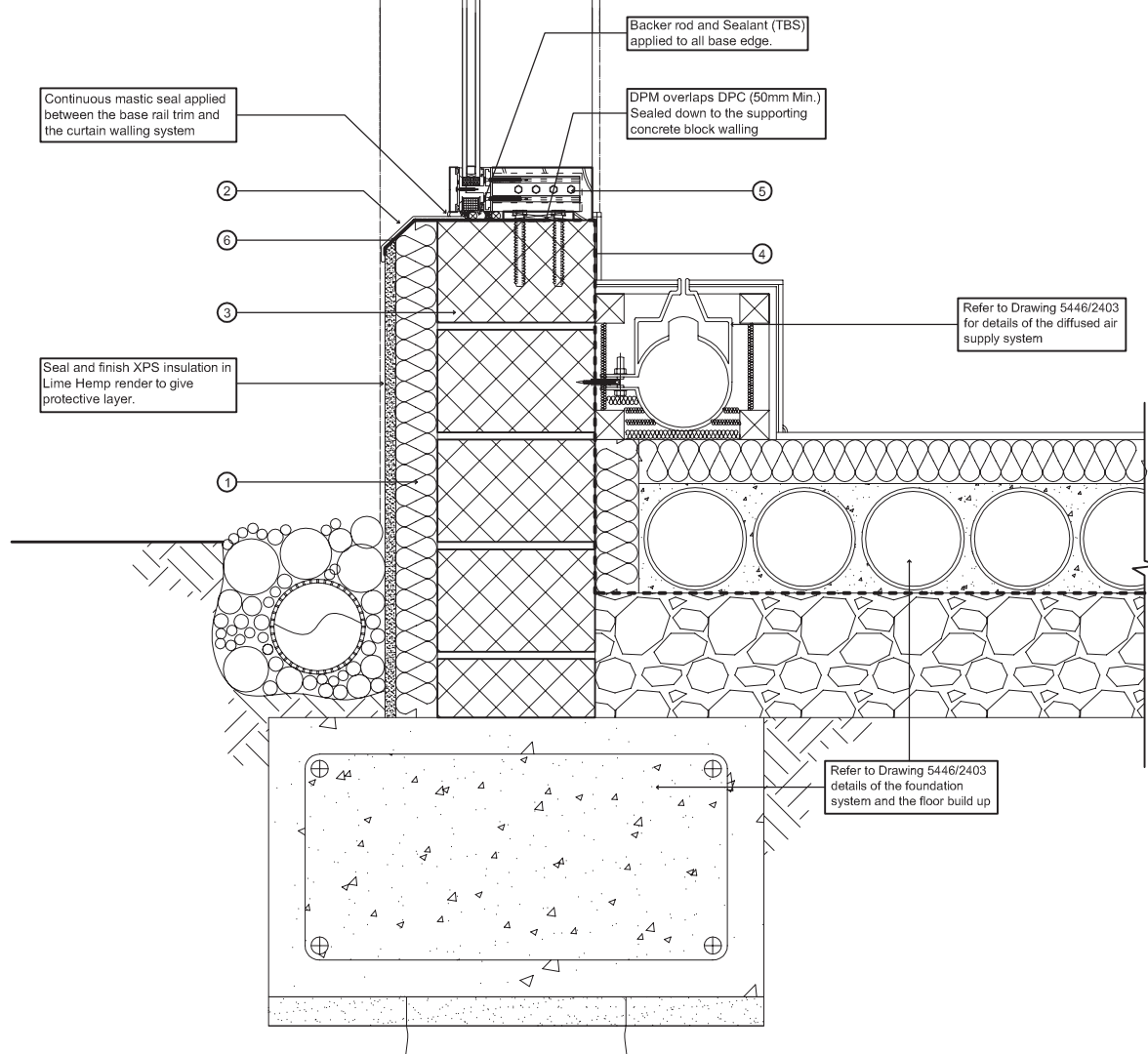
The incorporation of biomimicry (technology which reflects natural systems) into the design also generated innovation methods; the green roof system also acts as a natural water filter for the rain water harvesting, adhering to the principles of filtration as a result of chemical reactions around the top layer of ground conditions, with a diverse ecosystem of plants and animals. Material and method selection also



This page:
Section detail of
curtain wall.

Opposite:
Rear view of the
Centre by night.

‘The green roof
system also acts as a
natural water filter for
the rain water
harvesting’



shows evidence of innovation by the use of carbon negative cement which absorbs carbon through the curing process and the use of plastic void formers to reduce the quantities required.

Integration of fabric structures and services

With a complex system of building services, it was important that the services and the building fabric were responsive and considerate of each other. The choice of JJI hoists for all floor and ceilings allowed for the simple creation of floor voids which are utilised by the building services, especially allowing the MVHR system to access all

areas of ceiling exposure to both remove and provide heat. The innovative glazing coating, developed from natural pigments, which is applied to all the building glazing allows for further control over solar heat gains while in no way hindering natural daylight.

Judges' comments

An overall very well presented and organised project of an original and eye-catching design, this entry shows excellent technical aspects which are of a realistic and buildable nature. Reuben took into account considerable use of

sustainable technologies to the proposed site as well as the wider geographical environment.

An excellent design that embraced the principles of Architectural Technology, linked to the design and production process and the building performance of this project. There are considerable environmental issues covered which are to be commended. These are explained concisely and constitute the main design proposal. It is encouraging to see sustainable design continuing to constitute a substantial area of current teaching.



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Highly Commended Emma Walshaw ACIAT for Maggie's Centre, Nottingham

Emma Walshaw ACIAT, 29, was a student at Sheffield Hallam University and is currently working in a practice in Brighton. Her winning project was a hypothetical centre situated on the Nottingham University Hospital site, to be used as a non-residential support centre for cancer patients and their families and friends.

What was the greatest challenge you faced within the winning project?

The biggest challenge was to fulfill the end users' needs — I feel that using architecture to improve health and wellbeing has become an

important issue and a subject which I could embrace through Maggie's Centre. My aim was to try and design a building that would be welcoming, safe and calming but also be inspirational enough to lift people's spirits and enhance their optimism.

Do you have any trademark features and is this reflected in the winning project?

Organic shapes and forms tend to be where my projects direct me; however I am very interested in prefabrication techniques which automatically pull you toward linear designs.

What was your greatest influence when working on this project and how did it inspire you?

I had numerous influences but the main feature of the building, which is the gridshell roof, led me to study the Weald and Downland Gridshell and the Savill Building Gridshell in great detail and these were very influential.

Emma received a trophy, certificate and cheque for £400.



Technical focus: Maggie's Centre

Environmental strategy and sustainability

The environmental strategy for Maggie's Centre is a design for simplicity. Simple solutions that the staff and building users can control. Designing a building for people who are suffering ill health and in emotionally sensitive states makes it even more important to ensure a comfortable thermal environment, and calming surroundings. The building is orientated to benefit from passive solar gain in winter, natural light and views into the site. Therefore the building faces south and west opening up to the site to benefit from the

landscaping. The building turns its back on the hospital buildings around it but remains open and inclusive to the Breast Institute situated within the site. This offers a sense of partnership between the two buildings as many visitors of the Breast Institute will also visit Maggie's.

Construction design technology

Natural light is an important part of the Maggie's Centre design. All internal and external walls have clerestory glazing that reaches up to the gridshell roof. This allows natural light to flood through the building but avoids glare due to the protection from the roof overhang. The facades are glazed according to orientation. The south facade has two large glazed folding doors to allow plenty of light into the kitchen and sitting areas, rooms

which will be used most and will benefit from more natural light.

During the summer the roof overhang will protect the southern rooms from overheating, but during winter the sun will be able to penetrate into the rooms. The eastern facade has some glazing, but during the summer this will create a dappled light into the building due to the trees located on the eastern side of the site.

During the winter the activity room would benefit from morning sun streaming through the windows during support group sessions or activities. Glazing to the north facade has been limited, allowing light into the northern activity room but avoiding heat energy losses.

Cont'd overleaf

Maggie's Centre (continued)

Technical performance and innovation

Drawing on investigations into other gridshell roofs, it was decided it would be possible to integrate a steel edge beam into the gridshell roof. The steel beam would then be supported by steel columns curving to follow the line of the roof. To offer stability to the structure, and to avoid cable bracing, the use of double skin structural plywood was adopted, which is installed on top of the gridshell. Not only does this strengthen the structure, but also acts as a platform for the buildup of the roof.

For the roof structure, bespoke connection nodes were designed to suit the specific requirements of this gridshell roof. These connections offer flexibility in tilting and twisting to allow the roof to be formed in the specified manner. In addition, connections were developed to secure the gridshell to the steel edge beam, allowing for the varying angles of the roof whilst preserving a structural integrity.

'Buildability'

The proposed design has two main parts, following the groundworks and basement construction. The first part consists of the erection of the gridshell roof, which involves the assembly of the roof steelwork followed by scaffold platforms for the gridshell mat to be laid

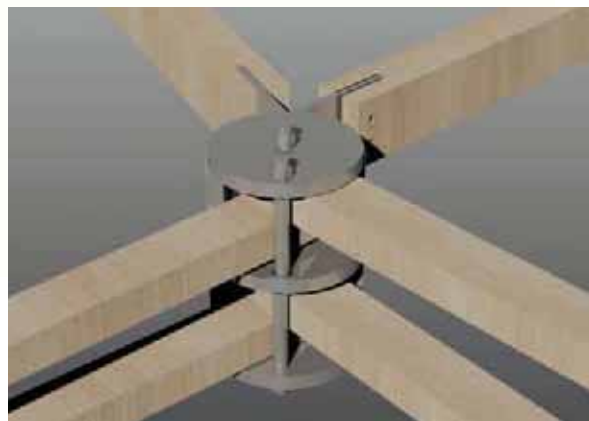
out prior to being lowered into position. The second part, once the roof is formed and secured, consists of a straightforward timber frame construction. Gridshell roofs are renowned for their complex forming process but with this proposal fully resolved and drawing from other gridshell constructions the procedure would be successful.

Judges' comments

This was an innovative project involving a complex and complicated roof structure that was presented in a form that gave the judges a critical insight into Emma's creative thinking and the proposed design solution. The project also demonstrated that Emma has a grasp of the aspects of Architectural Technology linked to the Award criteria.



Bespoke connection nodes were designed to suit the specific requirements of this gridshell roof



The 2012 Student Awards are now open!

Win up to £750 and a free upgrade to Associate membership



The CIAT Student Awards for 2012 are now open and you can double your chance of winning with the launch of the new Technical Report Award which sits alongside the existing Project Award.

Student Award for Excellence in Architectural Technology (Project)

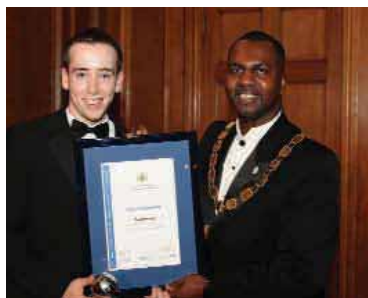
The Project Award is design based and can be your final year project or any other project you have worked on whilst studying. This is your opportunity to showcase your skills and be recognised for your excellence in Architectural Technology.

Student Award for Excellence in Architectural Technology (Technical Report)

This new Technical Report Award recognises your skills at report writing and allows you to enter if you don't produce a final year design project. The report can be based on a dissertation or assignment.

All entries are online and the closing date is 30 June.

To enter please visit
www.ciat.org.uk/en/awards/



Commended Conor Lawless ACIAT for Maggie's Centre

Conor, 22, is from Galway and graduated from Galway-Mayo Institute of Technology in 2010 with a BSc Architectural Technology degree, and went on to Sheffield Hallam for a year to achieve the honours degree. When not enjoying his interest in sport, Conor is currently seeking employment in Ireland.

How do you feel about winning the Award?

I feel extremely honoured to have received this Award. To be recognised by some of the most respected professionals in the field of Architectural Technology is something for which I am very grateful. It is an overwhelming experience and one that I will always have to look back upon.

What part of the winning project are you most proud of?

I am probably most proud of the fact that I was able to integrate passive environmental strategies and natural construction materials without compromising too much on the overall design, layout or aesthetics. It was important from the beginning of the design process that passive technologies were used, owing to the small scale of the building and the financial constraints of the client. In addition, a key consideration was the need for the creation of a 'healthy' indoor atmosphere. By maximising natural daylight intake and

optimising the use of natural ventilation throughout the building, reliance on the requirement for artificial measures is greatly reduced.

Is the project carbon neutral, if not what measures were put in to try and make it an environmentally friendly building?

The building is not carbon neutral, but numerous measures were implemented to improve the building's overall energy performance. Large areas of glazing along the south-west facade maximise natural daylight, while timber brise soleil provide shading and prevent solar glare. The open plan layout of the central areas within the building allows light to penetrate through, from one elevation to the other.

Does it conform to Passivhaus standards?

High performance triple glazed windows complement the natural materials used in the construction of the building envelope, while the lightweight timber frame walls and roof exceed Passivhaus thermal performance standards, as does the eco-friendly GGBS-constructed concrete floor. Thermal bridging is also eliminated via the use of under-slab insulation beneath the floor and an extra layer of insulation to the external face of the roof and walls.

What about ventilation?

Most ventilation is via manual opening of windows, though a heat recovery system is used in some rooms to improve efficiency. The building is heated using a micro-CHP boiler with biomass as a fuel source – this heat is distributed via an under floor heating system with a quick response time to suit the building's limited opening hours through the use of simplistic and largely organic elements. The building envelope effectively operates as a living skin.

Are the surroundings of the building as important to you as the building itself?

The concept of a continuous flow between inside and outside is fundamental in the development of the project's principles. The creation of an uninterrupted central circulation route through the building, via the continuation of the concrete pavement both internally and externally, allows users to feel a connection with the exterior. By incorporating an internal garden space with wooden decking, the outdoor environment is brought inside. The exterior landscape acts as buffer between Maggie's Centre and the 'outside' world.

Conor received a trophy, certificate and cheque for £250.





COMMERCIAL EXHIBITOR LIST

Adey Professional Heating Solutions	Energy Innovations	Pegasus Planning
Airflow	Energy Solutions	Pegler Yorkshire
All Eco Energy	Envirovent	Plumb Center
Allergy Plus	Epwin	Polypipe
Altec Solar	Eurocell	Powerperfector
Alumasc	Euroheat	Procure Plus
Ancon	Forestry Commission and Biomass Energy Centre	Pure eco Solutions
Applied Energy	Forever-fuels	Quinzi Electrical
Aquabion	Global Heat Source	Renewable Energy Academy
Asgard	Gold Search Media	Renson
Ashwell Biomass	Granada Secondary Glazing	RES
AVC Group	Green Building Store	Rexel Renewables
BASF	Green Gauge	RICS
Big Green Book	Halltech	Roofing Today
Billington Bio-Fuels	Hansgrohe	Rural Development Initiatives
Bio Equipment Ltd	Hedera	Rural Energy
BMF	HETAS	RW Simon
BRE Training	Highwood Consultants	Satir
Buchan Concrete	Hoval	Selectaglaze
Bugfish	Husky Heatpumps	Senior Architectural Systems
Carbomat	Ideal Boilers	Siemens
Carbon8 lighting	Imperative Energy	Smith's Environmental
Cavendish Engineering	Internorm	Scottish Passive House Centre
Cembrit	JDP	Solar Peak
CentroSolar	Jewson	South Survey
Chevron Training	Johnson & Starley	Stiebel Eltron
CIAT	Kedel	Surestop
CIBSE	Kingspan Renewables	Taylor & Francis
Cleaner Air Solutions	Klober	TechEnergy Corp
Clear Power	Ladder Safety Devices	The Green Electrician
Cool Planet	Landy Vent	T-Mac
CPL Industries	Linlar Profiles	Toshiba
Dalkia	Litecast	TP24
Danlers	Marshall Tufflex	UK Green Building Council
DFX Technology	Medem	University of Salford
Eco Designs	Mitsubishi Electric Commercial Heating	Viessmann
Eco Environments	NAPIT	Wagner Solar UK
Econergy	narec	Waxman Energy
Ecosheet	netMag Media	Wilo Pumps
Edgetech	NICEIC	Wood for Good
EMS	Nuvison Energy	Zero Carbon Hub
Encos	Oakapple	
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- Retrofit
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- Fabric First
- PassivHaus
- Energy Efficiency

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Adey Professional Heating Solutions	Forestry Commission and Biomass Energy Centre	Procurement for Housing
Airflow	Forever-fuels	Pure eco Solutions
Allergy Plus	Gold Search Media	Quinzi Electrical
Altec Solar	Granada Secondary Glazing	Renewable Energy Academy
Alumasc	Green Building Store	Renson
Ancon	Green Gauge	RES
Applied Energy	Halltech	Rexel Renewables
Aquabion	Hansgrohe	RICS
Asgard	Hedera	Roofing Today
Ashwell Biomass	HETAS	Rural Development Initiatives
AVC Group	Hoval	Rural Energy
BASF	Husky Heatpumps	RW Simon
Big Green Book	Ideal Boilers	Satir
Billington Bio-Fuels	Inteli Heat	Selectaglaze
BMF	Internorm	Senior Architectural Systems
BRE Training	JDP	Siemens
Buchan Concrete	Jewson	Smith's Environmental
Bugfish	Johnson & Starley	Scottish Passive House Centre
Carbomat	Kedel	Solar Peak
Cembrit	Kingspan Renewables	South Survey
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CIAT	Ladder Safety Devices	Surestop
CIBSE	Landy Vent	Taylor & Francis
Cleaner Air Solutions	Linlar Profiles	TechEnergy Corp
Clear Power	Litecast	The Green Electrician
Cool Planet	Logwise	Toshiba
CPL Industries	Marshall Tufflex	TP24
Danlers	Mitsubishi Electric Domestic Heating & PV	UK Green Building Council
DFX Technology	NAPIT	University of Salford
Discrete Heat	narec	Viessmann
Eco Designs	netMag Media	Vista Panels
Eco Environments	NHBC Foundation	V-Phase
Econergy	NICEIC	Wagner Solar UK
Ecosheet	Nuvision Energy	Waxman Energy
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Edgetech	Pegasus Planning	Wilo Pumps
Electric Heating Co	Pegler Yorkshire	Wood for Good
Encos	Plumb Center	Zero Carbon Hub
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Epwin		
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Technical focus: Maggie's Centre

(Continued from page 13)

Construction Design Technology

The construction of Maggie's Centre focuses on the use of natural, lightweight materials. The external walls of the building are to consist of an insulated timber frame inner leaf with additional slab insulation to the outer face of the frame. A ventilated cavity created using vertical timber battens is used to form a 'rainscreen' cladding principle behind the external horizontal Scottish Larch cladding. Windows are to be of timber/aluminum construction, with high performance triple glazing.

The ground floor slab of the building is to be constructed using eco-friendly GGBS concrete, with insulation installed below the slab to eliminate thermal bridging. Additional insulation above the slab improves the U-value of the floor. Finishes include solid timber boarding, marmoleum and tiles. Two zinc roofs are to be separated centrally by a glazed roof which runs through the plan of the building. The roofs are ventilated using horizontal timber cross battens and insulation is located both between and above the structure.

Glulam columns and beams provide the primary structural support for the building frame. A series of external 'double' columns with stainless steel connections are arrayed about the curve of the building's plan. Large glulam beams span onto internal columns, which are exposed to create an additional sense of character inside.

Technical performance

Much of the emphasis was placed on creating a

design that highlighted its simplicity and utilised the external building fabric as much as possible. The walls, floor and roof have been constructed to optimise not only thermal performance, but also airtightness and natural daylight levels.

The careful detailing of the highly insulated lightweight construction allows energy to be conserved in terms of heating requirements for the centre. The under floor heating system provides the buildings complete space heating needs. The dry screed system allows for a quick response time, suiting the regular (9am – 5pm) opening times of the building. Natural, single-sided ventilation of the open plan spaces can occur via the opening of windows along either of the long elevations. Automatically controlled clerestory windows release the warm air naturally. In the enclosed rooms such as the activities room and counseling rooms, a heat recovery system is to be installed in the suspended ceilings to improve the efficiency of the strategy.

In terms of lighting, the building is passively designed to optimise natural daylight levels by both maximisation and control. Large areas of glazing along the south west facade exploit the solar gain opportunities available and are shaded using a timber brise soleil overhang. The central open plan area allows light to penetrate the depth of the building, from one elevation to the other. The central glazed roof also permits light to flow through the central spine of the plan, with glulam beams providing shading.

Sustainability

From the conceptual phase of the design process, it was envisaged that the building would place much of its focus on the provision of natural products and materials, in addition to optimising the surrounding environment to maintain energy consumption at a minimum, thereby maximising its sustainable credentials. Timber was chosen as the primary construction material due to it being

a renewable source, while triple glazed windows and doors are used for their high performance levels, thereby creating a balance to achieve the optimal outcome. Zinc was selected as the roof finish due to its extremely long service life (60 - 100 years depending on location) and low maintenance requirements.

The inclusion of a micro-CHP boiler using biomass as a fuel source allows for the generation of electricity on-site, as well as providing the entire space and water heating demands of the building. Excess electricity can then exported back to the national grid.

By incorporating passive environmental strategies into the scheme, a sustainable building design can be achieved more effectively. The orientation of the plan and the positioning of the internal layout allow maximum levels of natural daylight into the centre, reducing the need for artificial lighting. Including natural ventilation techniques, such as taking advantage of thermal currents, negates the requirement for mechanical means.

Innovation

The Maggie's Centre project has been developed from natural materials to produce a design of high performance in terms of technology and efficiency. By creating a building envelope that performs effectively in terms of thermal efficiency, air tightness and moisture prevention, through the use of and Andrew Stanford ACIAT.

Judges' comments

Conor demonstrated a high degree of competent detailing linked to the technical excellence criteria. The design solution demonstrated the use of locally sourced materials and the integrated sustainability was a main feature of his design. The strength of this project lay in its simplicity which also gave good long term performance through low cost operation and maintenance.

ZINC ROOF FINISH

0.7MM DOUBLE LOCK STANDING SEAM ZINC ROOF WITH NATURAL FINISH. SEAMS TO BE LOCATED AT 600MM CENTRES ALONG THE ROOF SURFACE TO A HEIGHT OF 25MM.

VENTILATION SPACE

A CONTINUOUS VENTILATION LAYER OF MINIMUM 40MM IS TO BE PROVIDED IN THE ROOF USING 50MM X 50MM TREATED SOFTWOOD COUNTER BATTENS AT 600MM CENTRES IN ACCORDANCE WITH BS 5525: 1991.

GLULAM ROOF BEAM

90MM X 450MM GLULAM TIMBER BEAM PROVIDING PRIMARY STRUCTURAL SUPPORT FOR THE ROOF SYSTEM.

TIMBER WALL CLADDING

19MM X 100MM SCOTTISH LARCH HORIZONTAL SHIP LAP TIMBER CLADDING BOARDS NAILED TO VERTICAL SOFTWOOD BATTENS.

HIGH PERFORMANCE WINDOWS

TRIPLE GLAZED INWARD OPENING TOP HUNG TIMBER WINDOW WITH ALUMINIUM CLADDING AND THERMALLY BROKEN FRAME ACHIEVING WHOLE WINDOW U-VALUE OF 0.7W/M²K.

GLULAM COLUMN

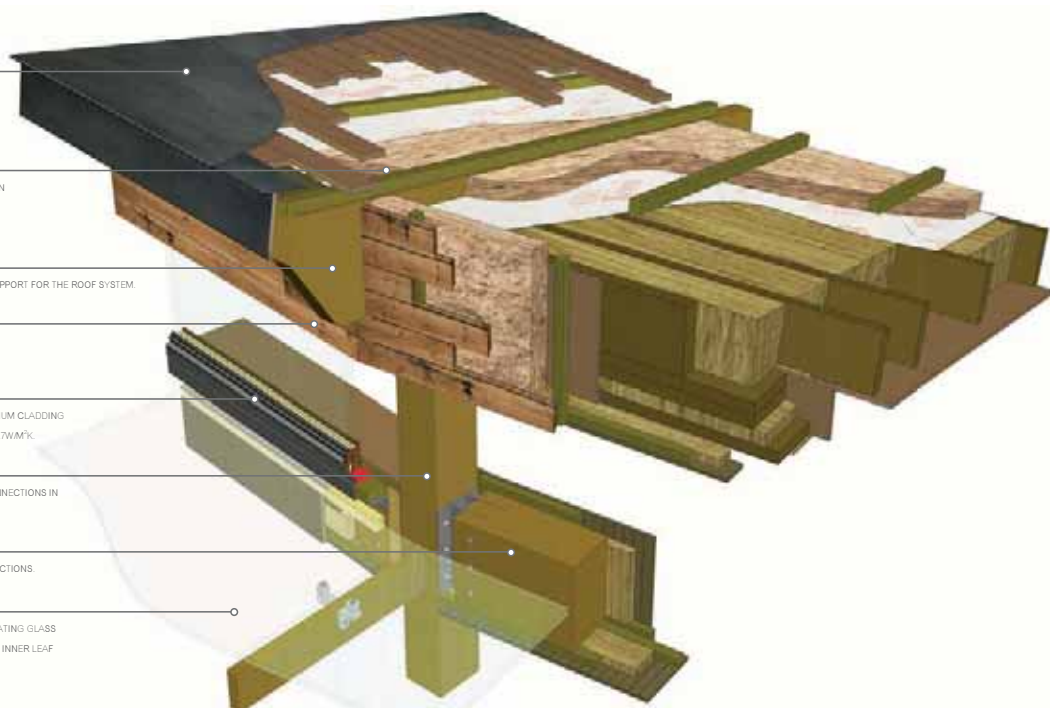
240MM X 200MM GLULAM TIMBER COLUMN WITH STAINLESS STEEL BOLT CONNECTIONS IN ACCORDANCE WITH STRUCTURAL ENGINEER'S SPECIFICATIONS.

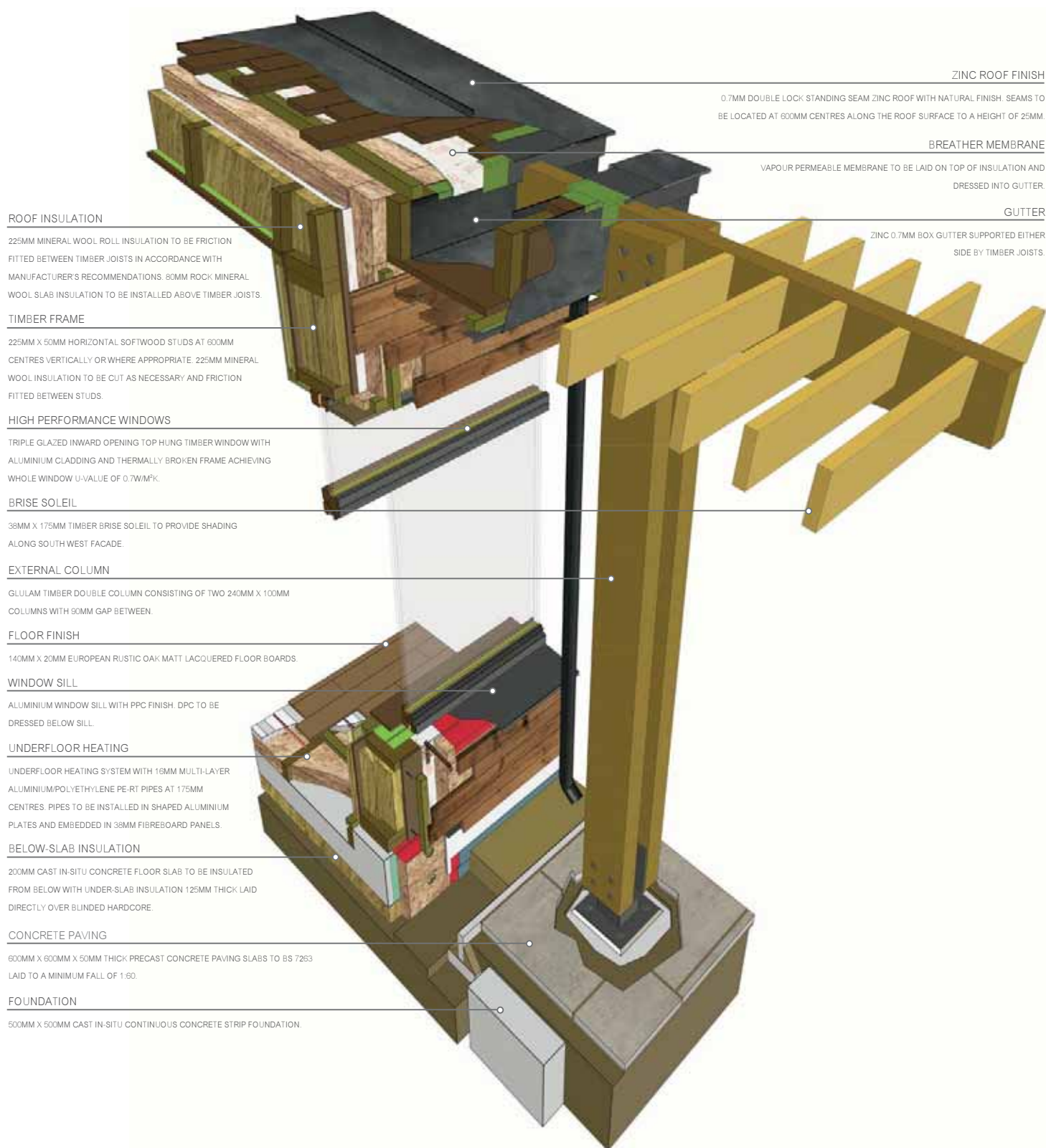
GLULAM BEAM

240MM X 405MM GLULAM TIMBER BEAM WITH STAINLESS STEEL BOLT CONNECTIONS.

ROOFLIGHT GLAZING

STAINLESS STEEL PLANAR FIXINGS WITH DOUBLE GLAZED LAMINATED INSULATING GLASS UNIT CONSISTING OF 10MM CLEAR OUTER LEAF AND 6MM LAMINATED GLASS INNER LEAF WITH 16MM ARGON FILLED CAVITY.





The Student Award for Technical Excellence in Architectural Technology

The Student Award for Technical Excellence in Architectural Technology is based upon technical excellence within Architectural Technology and entrants must demonstrate this by illustrating the composition of ideas put into practice and taken from a university/college assignment or a live project.

Criteria for the judging include innovation, sustainability, technical performance, 'buildability' and integrated health and safety. The judges were Norman Wienand MCIAT, Vice-President Education, Professor Sam Allwinkle PPBIAT MCIAT, Aimie Rimmington MCIAT and Andrew Stanford ACIAT.

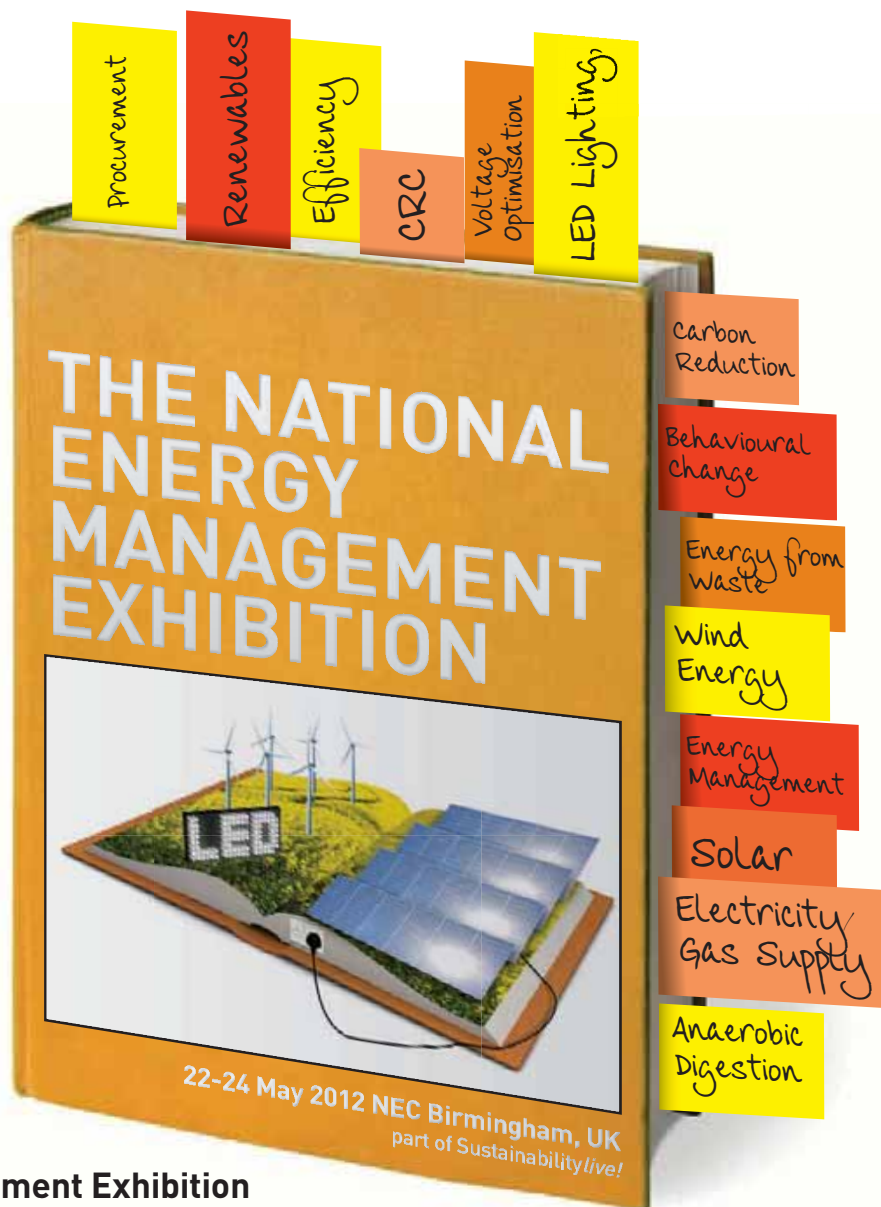
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CIAT and NEMEX

This year's National Energy Management Exhibition (NEMEX), supported by CIAT, features major industry speakers addressing key energy issues. Find out more about what is on offer to visitors.



Left: the three day seminar programme will include discussion of energy policy and electricity market reform

This year's National Energy Management Exhibition (NEMEX) opens at the NEC Birmingham in May, featuring a new second conference theatre to mark its 30th anniversary with a host of top-level keynote speakers who will be expanding the ideas and available advice for energy professionals.

One of the country's leading environmentalists, Tony Juniper, will be spearheading the NEMEX seminar programme, alongside a number of influential MPs, including Barry Gardiner MP, Ed Milliband's Special Envoy on Climate Change and Environment, and Alan Whitehead MP, Chair of the All Party Parliamentary Renewable and Sustainable Energy Group.

2012 celebrates three decades of showcasing technologies for NEMEX, which continues to attract rising numbers of visitors from a wide range of public and private sector industries, all keen to find out more about the very latest sustainable and energy-efficient solutions.

Leading government experts will be joined by their counterparts from commerce and independent commentators to explore some of the key environmental issues faced by businesses. The main challenge of course being how to reduce energy usage in line with the strict targets

Visitors can access a total of six seminar theatres

set by the UK Government: to reduce CO₂ emissions by 80% by 2050 and to obtain 15% of the country's electricity from renewable sources by 2020.

The renowned independent sustainability and environment adviser, Tony Juniper, will be looking at why behavioural change has been a relatively-neglected aspect of the sustainable development debate. As well as offering insights into possible remedies, he will suggest the need for a more sophisticated approach to shaping people's actions in relation to sustainability outcomes as we move towards a low-carbon economy.

Other high-level commentators during the three-day seminar programme include Norman Baker MP, Under Secretary of State, Department for Transport and David Porter, Chief Executive of the Association of Electricity Producers, each delivering sessions on energy

policy and electricity market reform. Meanwhile, Alan Whitehead MP will be discussing managing the demand for energy, including that from renewable sources.

For visitors to the NEMEX exhibition, there are many other attractions to capture the imagination, including the award-winning EcoInteractive displays from Global Action Plan that are cleverly designed to motivate individuals to change behaviour. Learn about the importance of water conservation through the fun quiz-based Water Explorer, or why not try the Eco-Driving simulator that teaches eco-driving techniques to save money and carbon?

The free-to-visit NEMEX show, featuring 375-plus exhibitors across Sustainabilitylive!, will take place on May 22-24 in halls 3 and 3a at the NEC, Birmingham. As NEMEX forms part of the Sustainabilitylive! exhibition, visitors can access a total of six seminar theatres collectively hosting over 100 hours of environmental debate on a wide range of industry topics.

All the latest exhibitor news, features programmes, information on how to exhibit or how to register for free attendance can be found at www.sustainabilitylive.com or by calling 020 8651 7106.

Architecture in the round

Norman McIntosh MCIAT of Roundhouse Architecture reports on an interesting work in progress – a modern work studio based on a centuries-old agricultural design, which he is building himself.



Left: impression of the roundhouse.

Above: Norman McIntosh MCIAT

Roundhouse Architecture – where did we get this name from? It started a couple of years ago as part of my ambitious plans to gently expand our small practice – we needed more space and a better working environment with room to meet our clients. With this in mind I gave our team an architectural challenge to design a new studio with a difference. Eventually this arrived in the form of a traditional roundhouse with a contemporary touch, and feeling of space and light. As a result of this initial hard work we changed our practice name, developed our first website and I grasped the challenge, quite literally, with both hands. I decided to build the studio myself in my spare time, with the fantastic support of my wife June and our family and friends.

The roundhouse theme was inspired by seeing a 'farmsteading roundle' which had originally been used to accommodate a horse to drive a central mill wheel, and which had since been converted to a lounge as part of a domestic conversion. The interior space was fantastic, so June and I immediately set about replicating this to form our new studio.

Another typical form of this building is known as a *Crannog*, an ancient type of loch-dwelling, examples of which are found throughout the British Isles. With careful attention to design detail and construction methods to be adopted, Planning Permission and Building Warrant were obtained as part of the Statutory Approval process.

Construction work began in April 2011 with the breaking of ground to track foundations and the work has progressed steadily. As I am a practical Chartered Architectural Technologist and passionate about my work and profession, almost all of the work (apart from electrical) will be carried out by my own hands with the able assistance of my work colleagues and friends. The use of traditional materials such as re-claimed local sandstone, secondhand Welsh slate with detailed lead work and vertical Scots larch cladding will all ensure the finished studio fits with the surrounding landscape.

The main section of the building will be open plan. The roof self supports as part of the design feature, with no central support column. The exposed rafters (64 in total – I counted every one of them as we manhandled each into place) will provide a spacious visual feature within the studio area. The studio will be fully compliant with DDA regulations in terms of accessibility and facilities.

The building, insulated above current building standard regulation requirements will benefit from under floor heating throughout, linked to a remote sustainable biomass heating system in the form of a log burning boiler. The same heating system will link into our existing house helping to reduce our oil consumption.

Work is ongoing and the progress can be viewed on our Facebook page where I post regular updates. At present, I am fitting

Another typical form of this building is known as a *Crannog*, an ancient type of loch-dwelling

treated timber sarking boards on the roof ready to accept the slate roof covering. Interestingly, I have received correspondence from as far afield as Australia and America which has included fantastic advice on slating work as each and every slate will have to be hand dressed or cut to fit the tapered nature of the roof. Similarly, I am cutting every sarking board in a taper to fit vertically up the roof slope. Normally these boards are fitted horizontally on a roof and only part of the roof is done in this fashion, merging with the vertical boarding as the roof begins to curve. The gutter and rainwater downpipe system will be formed in cast aluminium discharging to an underground rainwater harvesting tank for use in our garden.

As this is an unusual project, I would welcome comments or advice as I enjoy sharing my experience where possible.

Roundhouse Architecture Ltd
The Roundhouse, Lochside Road, St Cyrus,
Aberdeenshire DD10 0DB
Email: norman@roundhousearchitecture.com
Web: www.roundhousearchitecture.com

The CIAT Project Quality Plan

Keeping track of work on a project and liaising with clients can sometimes be more difficult than working on the project itself. That's why CIAT has introduced the Project Quality Plan (PQP), to help practices easily plan, set targets and keep comprehensive records of their projects. *AT* magazine talked to Mark Kennett PPCIAT, who helped set up the project.

Briefly, what is the Project Quality Plan?

It's a CIAT devised quality management system which promotes good practice and procedures in running your projects and your practice.

What's the advantage for CIAT practices?

Projects are frequently intermittent in nature and without a plan keeping track can be difficult. A commission may initially be for a 'partial service' eg a feasibility study, or to determine a brief only and subsequently may not be extended. This gives good reasons for project quality plans to be prepared and continually reviewed and updated.

What's the advantage for clients?

Whilst it's comforting for a client to know that a practice has good procedures for running the practice, their principal interest is that the practice will have proper procedures related to their project. Some practices may wish to adopt more comprehensive quality management procedures, but this document addresses more immediate client expectations.

Is it for big or small practices?

It can be adapted for either; and is devised so that it can be one or several members of a practice. Good planning documentation should pass the 'under a bus' test; ie, what happens if the person in charge of the plan falls under a bus, could colleagues easily take over? We think that the PQP passes this test.

How does it relate to other plans such as the RIBA Plan of Work?

The PQP is a useful management control mechanism and not to be seen as 'additional documentation required for QA'. The already familiar RIBA Plan of Work (now 'Project Plan') which has stood the test of time and has been adopted in whole or part by other disciplines has been used as a framework.

How do users get started?

Download a copy of the Plan from the CIAT website (which is kept updated). This contains

guidance and pro-forma documents and specimen letters for you to use. Create a template and make any generic adjustments to suit the practice. The base document contains internal and external links note that these may be affected by any amendment you may make.

What sort of things will it help members keep track of?

Your plan should record project details, a definition of the client's brief, a definition of the scope of service that you will provide, a record of any critical processes which may differ from normal office practice, a definition of how you will approve/verify the stages of the project (such as design reviews and statutory approvals) and finally, methods of measuring achievement after the project's completion.

It sounds a lot of work.

The system is adaptable according to project size. The above requirements may seem onerous when applied to a job that may be completed by one person in a couple of weeks. So for a small project, the quality plan may just be a few structured notes (which can be

handwritten) in the front of the project file. Quality systems only require legible/intelligible documents of the appropriate level of rigour, not necessarily word-processed ones!

How much does it cost?

It is free to download from the CIAT website.

Where do members go from here?

Download the documents from Member Services in the Practice Resources section at www.ciat.org.uk. If you need further guidance, please contact Graham Chalkley, Assistant Practice Director. Email graham@ciat.org.uk or telephone +44 (0)20 7278 2206.

What happens if the person in charge of the plan falls under a bus?

Below: a sample page from the plan

Project Quality Plan					/PQP/Prog	
COMMISSION/PROGRAMME Procurement <u>method</u> :						
WORK STAGE	DESIGN AND OTHER REVIEWS (type/scope/date)	START (dates) PLANNED/ACHIEVED	COMPLETE (dates) PLANNED/ACHIEVED	INITIALS (inc. client approval as nec)	COMMENTS	
PRE CONSTRUCTION						
<u>A</u> : Appraisal						
<u>B</u> : Developed Brief						
<u>C</u> : Concept						
<u>D</u> : Design Development						
<u>E</u> : Technical Design						
<u>F</u> : Production Information F1 for construction F2 further as req.						
<u>G</u> : Tender Documentation						
<u>H</u> : Tender Action						
USE						
<u>J</u> : Mobilisation						
<u>K</u> : to Practical Completion						
<u>L</u> : Post Practical Completion L1 final inspections and admin <u>L2</u> assisted occupation <u>L3</u> performance in use						
Other Services						



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POP: the questions

Completion of the Professional and Occupational Performance (POP) Record is an essential part of becoming a Chartered Architectural Technologist. CIAT Membership Director James Banks talks to two candidates who joined via the Profile route.



Stuart Lacey MCIAT

Tell us about your background.

I started my career in construction as an apprentice bricklayer and in a period of over 45 years I have worked in almost all forms of construction in both manual and management rolls. Throughout my career I had always taken a keen interest in the design aspect of construction, in 1999 I decided to return to college part time for three years to study Computer Aided Design.

During this period I was working for a Design and Build company as Senior Project Manager when I had the opportunity to move into the design section, this was something I had always wanted to do. I am currently Managing Director of Lacey and Owen Architectural Services Ltd in Ilkeston, Derbyshire.

How did you approach your POP Record?

I joined CIAT as a profile candidate having no recognised qualifications but with over 10 years' experience. For the Underpinning Knowledge Section, having no academic experience I had to do a lot of reading and research. I combined with this my experience on past projects I had worked on in both a manual and management capacity. For the Performance Section again I utilised past projects which enabled me to meet the relevant criteria needed.

Although at first glance the whole POP record procedure seemed quite daunting! After careful consideration and discussions with my supervisor, I decided the best way forward was to evaluate all the units for both the Knowledge and Performance sections and assemble them in order of construction methods.

Who acted as your Supervisor and why?

I chose a local architect, David McPhee RIBA whom I had worked with on various projects as my Supervisor. I chose David because I had worked closely with him on numerous projects initially as Contracts Manager, and later on in my career when I made the transition into design work. I also had support from my work colleague Mark who has a BSc (Hons) in Architectural Technology.

How long did it take you to complete?

After much deliberation I started to take a serious look in November/December 2008 and had them ready to submit in June 2009, although I had to supply further supporting evidence in July 2009 I eventually passed in August 2009.

How did you find the POP panel process?

My initial thoughts on seeing how the POP Records were set out was one of apprehension. At first glance it seemed rather complex, I attended a POP record workshop in 2008 which did clarify a few points and was well worth attending. Overall once I realised what was required I found the process straight forward.

How did you find the Professional Practice Interview?

Having gone through the whole of my career in construction without having any kind of formal interview one can imagine the state of mind I was in on arrival! I found my fears were totally unfounded, as the interview from start to finish was in a relaxed and friendly atmosphere whilst conducted in a professional manner. It was also a great relief to get the result of the interview on the day rather than having to wait adding more stress to the process.

Gaining my Chartership has been of huge benefit

Do you have any advice to candidates currently completing their POP records?

The main factor in enabling me to complete my POP Record successfully was my experience, I would advise any prospective candidates about to embark on their POP records to have the experience and knowledge required before starting, especially for the Performance Section.

Are you willing to help others in your local area with their POP records?

I am already acting as my practice partner's Supervisor. I also think it is important to help fellow members of the Institute to attain Chartership as this will benefit the Institute as a whole.

How has the qualification benefitted you?

Gaining my Chartership has been of a huge benefit to me personally; it has enabled me to set-up and run my own CIAT-registered practice, giving me the freedom to express myself architecturally, something I would only have dreamed of five years ago. It has also opened doors academically as I have just started my final year on the BSc (hons) in Architectural Technology and Practice at Derby University, and at 62 years of age proving that the old saying 'you are never too old to learn' rings true.





Chris Rogers MCIAT

Tell us about your background

I currently work as the Technical Manager for Anthony Rickett Architects Ltd, an architectural practice covering all aspects of development. I started my construction career as a Royal Engineer in the British Army. Since leaving I have gained over 12 years of civilian construction industry experience in retail, commercial and residential sectors.

How did you approach your POP Record?

All knowledge sections of my POP Record had to be substantiated entirely from industry relevant work experience. I was aware of the POP Record criteria when I first became Profile member and to this end did not begin completing the document until I felt that I had enough time and experience to start and finish all the units in good time.

The performance elements of the POP Record were largely dealt with by spending many hours in our archive room pulling my old files that were relevant to the unit requirements.

Who acted as your Supervisor and why?

One of the practice Directors, Dan Rickett, acted as my principal Supervisor. Having worked alongside me on many different projects he was ideally placed to comment and advise throughout the process. My practice encouraged the progression to Chartered status and without their continued support the POP Record completion would have been a great deal more time consuming and complex.

How long did it take you to complete?

I had been a profile candidate for many years. Once I decided to progress to Chartered membership I completed the POP record in five months. That said, this is merely the time it took to collate the relevant information and not a true reflection of the time it takes to be in a position to demonstrate the knowledge and performance.

How did you find the POP Panel Process?

The construction industry is extremely diverse with many avenues available to demonstrate the range of knowledge and experience applicable to the individual POP units. As a result when I first started the POP Record I found it easy to digress from the unit criteria and end up on a tangent before realising that I had not addressed the actual core knowledge required.

Before continuing I attended a POP Record Workshop which clearly set out different ways in which the POP record could be completed. This confirmed my chosen approach and enabled me to proceed with some confidence. Although the record can be completed in numerous ways I opted to treat each of the unit sub sections in a 'question and answer' style which focused my attention on providing the relevant information.

How did you find the Professional Practice Interview?

This was possibly my biggest surprise throughout the application. I am happy to say it was a pleasant one as I had anticipated a formal grilling of the submitted material and industry knowledge. It turned out to be a far more relaxed environment than I had expected, with the two professional assessors putting me at ease. Although aspects of the panel were challenging I would advise future candidates not to get too anxious about this stage. Preparing yourself fully on your chosen subject matter should provide you with the confidence you need.

Do you have any advice to candidates currently completing their POP Records?

It is worth attending a brief CIAT organised seminar prior to starting as this will help you understand the document and process as a whole.

Although aspects of the panel were challenging I would advise future candidates not to get too anxious about this stage

Keep an up-to-date log on personal reviews, goals and CPDs as this will almost certainly be required.

Keep track of all your projects and note down the relevant file ref and archive numbers so they can be easily retrieved.

Be mindful that you may require project relevant information from previous places of work.

Are you willing to help others in your local area with their POP Records?

Yes. I have organised informal practice and regional talks on POP Record completion. I am fortunate that Anthony Rickett Architects adopt a philanthropic attitude in the advancement of staff and fully support all aspects personal professional development.

How has the qualification benefitted you?

My role within the practice involved managing members of staff that were far more academically qualified. Achieving Chartered status has redressed this balance.

Other obvious benefits would be the reassurance of competence to clients and fellow professionals. CIAT gains further recognition and popularity year on year, as a result the status of the qualification is strengthened and I am happy to be part of its success.



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Construct online

David Comiskey MCIAT of the School of Architecture and Design at the University of Ulster discusses the development of Construct Online, an online learning resource developed to aid first year Architectural Technology and Management students gain an understanding of the design and construction process of domestic buildings.

The variety of entry routes on to the Architectural Technology and Management undergraduate degree programme at the University of Ulster results in a first year cohort in which some students have previous construction knowledge, while others have very limited experience of it.

Many students with no prior construction knowledge have difficulty relating the theory taught in lectures to real world examples and understanding how various technical details are constructed in reality on site.

Site visits are an important part of an Architectural Technology student's education, especially those students with a lack of background experience, as they help to give an awareness of construction techniques, ensuring students are comfortable assessing and identifying problems which may arise. However, with increasing class sizes, reduction in construction activity and stringent health and safety requirements, it is becoming increasingly difficult to incorporate as many site visits as would be preferred. The Construct Online initiative aimed to overcome some of these issues, enabling students to gain a real life understanding of the processes involved in the construction of a building without having to leave the classroom.

Construct Online was developed through funding from the Centre of Higher Education Practice at the University of Ulster. It is a web resource which hosts a series of videos following the construction of a new build dwelling. The videos focus on the technical aspects of architectural design, covering important elements of domestic construction, such as; foundation design and construction, substructure, superstructure, roof construction, incorporation of services and building finishes.

The footage also captures visits to site by the local Building Control Manager who provides commentary on the compliance of the build with current Building Regulations. The website hosts a number of quizzes which complement the videos produced, thus allowing students to test their knowledge on various areas relating to domestic construction.

Screencasting software was used to produce the videos which were then edited before



being hosted online. The use of this software allowed the videos to be edited to focus on the more technical elements of the build. Audio commentary was also provided to guide the students through the various stages in the construction processes.

Students with no prior construction knowledge have difficulty relating the theory taught in lectures to real world examples

Although this project is still in its early stages, the feedback received from academics, practitioners and students alike has been very positive. The fact that the learning resource presents students with real-life scenarios has been extremely beneficial.

This method of teaching and learning will not replace the experience that can be gained from visiting construction sites, nor does it seek to,

but it can provide a setting for students to gain an understanding for what happens on construction sites and follow the construction of a building from commencement to completion, something which is not possible with one-off visits.

Construct Online is one of a number of innovative teaching and learning projects being undertaken by Architectural Technology and Management staff at the University of Ulster. Other projects include the use of screencasting software to produce video feedback for students, the creation of a novel online CAD assessment and a teaching exchange programme which provided exposure to different teaching methodologies and approaches to enrich current teaching practice.

Anyone interested in receiving further information on this resource should contact:

David Comiskey, Lecturer
School of Architecture and Design
University of Ulster at Jordanstown

Phone: 028 90 366476
Email: da.comiskey@ulster.ac.uk

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