Architectural Technology Journal

FROM THE CHARTERED INSTITUTE OF ARCHITECTURAL TECHNOLOGISTS
£6.00 – ISSN 1361-326X – ISSUE #145 – SPRING 2023

AT Awards 2023 now open for entries

The AT Awards opened for submissions and nominations on 6 February 2023 for the following Awards:

- Excellence in Architectural Technology
- Student Awards for Excellence in Architectural Technology
- Emerging Talent in the Technology of Architecture
- The Chartered Architectural Technologist of the Year
- Gold Award

Full details and application forms can be found on the website. Winners will be announced and presented at the AT Awards event on 20 October 2023.

The AT Awards are recognised as the premier accolades that demonstrate outstanding achievement in Architectural Technology and celebrate the technology of architecture.

AT AWARDS

architecturaltechnology.com/awards.html
#ATAwards

Headline sponsors:

UNILIN INSULATION

MFL INSURANCE GROUP

ARP Metal Rainwater and Roofline Systems

Editor
Adam Endacott
editor@ciat.global
+44(0)20 7278 2206
Advertising
atpromotions@ciat.global
Published by
CIAT, 397 City Road,
London, EC1V 1NH UK
architecturaltechnology.com

Online
/Chartered Institute of Architectural Technologists
@CIATechnologist
/CIATechnologist
/CIATechnologist
/CIATechnologist

President
Kevin Crawford PCIAT
president@ciat.global

Chief Executive
Tara Page
t.page@ciat.global

Practice & Technical Director
Diane Dale
d.dale@ciat.global

Education Director
Dr Noora Kokkarinen
n.kokkarinen@ciat.global

Membership Director
James Banks
j.banks@ciat.global

Design
Darkhorse Design
ciat@darkhorsedesign.co.uk
+44(0)20 7323 1931

Subscriptions
AT Journal is free to all members and affiliates of CIAT. Subscription rate for non-members is £30 (UK) and £35 (overseas) per annum (4 issues) or £6 per issue.

ISSN 1361-326X.

CIAT

Editor's welcome

'Here comes the sun' is a phrase we are well reminded of at this time of the year as we fast approach spring. Recorded by The Beatles in 1969 at Abbey Road, I recently watched the documentary about the studios by Mary McCartney, If These Walls Could Sing. Whilst it concentrates on the music produced at the famous recording studio, it also includes background on the building itself. The building was originally a nine-bedroom Georgian townhouse and with some adaption to the structure, it was turned into the recording studios it is today. It is fascinating to see the studio space and the main recording studio for a full orchestra. If you have Disney+, then I recommend viewing.

Staying on the theme of watching TV, did any readers watch the Christmas edition of Blankety Blank on BBC One? Hosted by Bradley Walsh, one of the contestants was Abraham from London and was a student studying Architectural Technology! Unfortunately, Abraham only went away with the infamous Blankety Blank cheque book and pen but it was great to hear our discipline get a mention.

This issue is the first overseen by our new Chief Executive and Editor in Chief for the Journal, Tara Page. Tara took over on 1 January and you can find out a bit more about her in this issue on page five. We hope to have a full interview with her in a future edition.

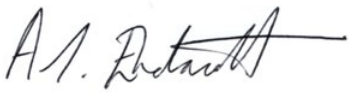
It is also that time of year when our premier Awards launch for entries and I would like to encourage you to consider entering them. The AT Awards opened on 6 February and there are a variety of categories for all to apply for and you can find all the information you need at: architecturaltechnology.com/awards. There are Awards for projects and people so please do think about entering or nominating somebody to recognise excellence in Architectural Technology.

For some in the new year, it is an opportunity to look for a new job. If you are looking for employment or seeking a new position, then please do take a look at AT|jobs on our website. This is the job board for all Architectural Technology related positions and can be found here: architecturaltechnology.com/jobs. The positions also feature regularly in AT Weekly.

This issue features the manifestos for our Honorary Officer elections which take place in September, please do take a moment to have a read and if you have any thoughts on who should be elected then please do contact your Regional/Centre Secretary.

In my usual sign off, please do get in touch as I would love to hear from you regarding anything in this edition or if you have any ideas for future articles – this is your Journal and I welcome all ideas and feedback – email me at editor@ciat.global.

I hope you enjoy a peaceful Easter when it arrives.



Adam Endacott
Editor

Tara Page, the new Chief Executive

I am thrilled to be taking on the role of Chief Executive and leading the Institute into its seventh decade. There is much work to be done for Architectural Technology, the Institute and our members and affiliates.

Tara Page is the new Chief Executive for CIAT and officially took the position on 1 January 2023.

Tara said "I am thrilled to be taking on the role of Chief Executive and leading the Institute into its seventh decade. There is much work to be done for Architectural Technology, the Institute and our members and affiliates, and I am keen to tackle upcoming policies and issues to ensure Architectural Technology is recognised further, representing Chartered Architectural Technologists at the highest levels. Having worked at CIAT for many years, I have a rich insight into the opportunities and challenges we face as a profession and the built environment sector, and how we can lead and influence change.

I will be working with a dedicated team of members, staff, the Board and stakeholders on pertinent issues to tackle the very real challenges such as the skills shortages, the implementation of the Building Safety Act, the impacts of BREXIT and much more. I will endeavour to further develop the position and status of Architectural Technology, its community and the Institute for the betterment of society."

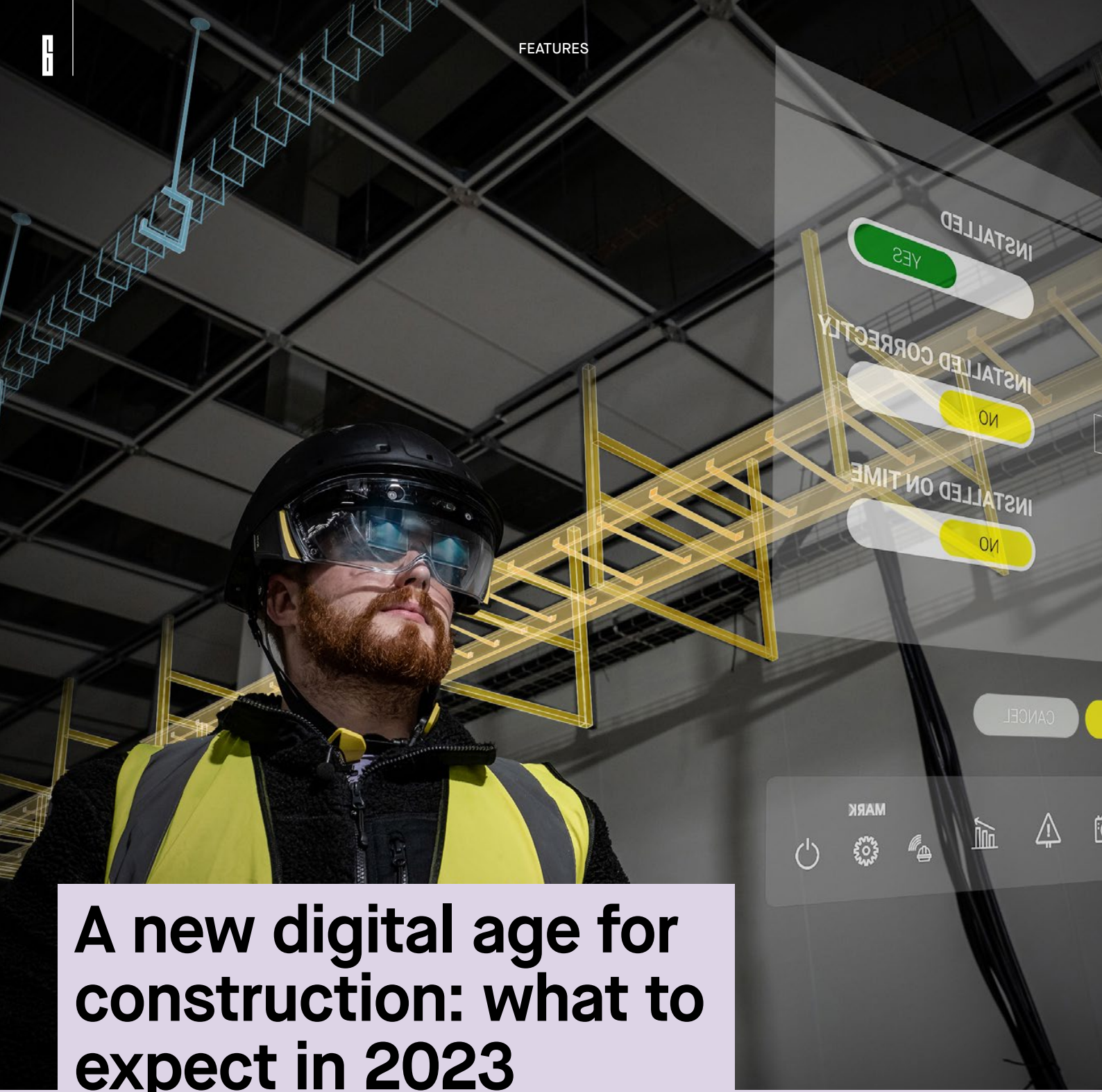
President Kevin Crawford PCIAT said "On behalf of the Executive Board, we very much look forward to working with Tara. With her strong and vibrant personality, vision and ambition, we have every confidence that she will lead the Institute to build further upon its success and reach for both the discipline and profession. She has already been an excellent asset to CIAT and has the experience and foresight to take us into the Institute's next phase."

Before being appointed as CEO in 2023, she was a key member of the senior management team for over 15 years as Education and International Director, with overall responsibility for the development and delivery of CIAT's educational activity and its international advancement. Previously, Tara was Construction Manager at City & Guilds, where she was responsible for managing an extensive portfolio of high revenue vocational construction qualifications.

In her time at CIAT, she has been instrumental in raising the profile of Architectural Technology and the Chartered Architectural Technologist profession globally, including through the establishment of the Institute's Chartered Environmentalist scheme, the CIAT-Accredited Conservationist qualification and CIAT's Fellow class of membership. She held a key role on the Review Group for the Quality Assurance Agency (QAA) Subject Benchmark Statement for Architectural Technology 2022 and led the development of CIAT's own Professional Standards Framework.

Recognising the importance of maintaining strong links and networks, Tara has secured solid relationships, partnerships and collaborative agreements with different organisations such as universities, research networks, industry bodies, professional organisations, and government both in the UK and internationally. Examples of this include instigating agreements with the Royal Institution of Chartered Surveyors (RICS), Konstruktørforeningen (KF) in Denmark and others, and representing the Institute as a Principal member on the Association of European Experts in Building and Construction (AEEBC).

Tara has a BA (Hons) European Business Studies with Italian, and has recently successfully completed a two-year Level 7 Senior Leader Apprenticeship, which includes a Masters of Business Administration (MBA). She is a Chartered Member of the Chartered Management Institute.



A new digital age for construction: what to expect in 2023

Words by David Mitchell, Chief Executive, XYZ Reality

Despite a strong start to 2022, the construction industry faced strong and persistent headwinds last year. Labour shortages, unprecedented material prices and crippling supply chain issues, all underpinned by rising inflation, led to the industry experiencing the highest level of insolvencies across all UK industry sectors (17%[1]), with many more predicted for 2023.

The outlook for the sector is worrying, at least in the short-term, but I believe there are also reasons to be optimistic.

Innovation, in particular the uptake of advanced digital technologies, continues to offer a light at the end of the tunnel, offering solutions to many of the challenges facing the construction sector. As such, the digitalisation of construction will continue to be a major trend for 2023, and beyond.

Innovations like computer aided designs (CAD) and building information modelling (BIM) are becoming the norm across a range of verticals within the construction industry, from residential properties to large infrastructure and mission-critical projects.

Construction is going digital, and to support it, designers, engineers and construction workers are routinely using technologies like augmented reality (AR) and LiDAR to manage projects and build more efficiently. Looking at the year ahead, I expect we will see greater integration of digital solutions into contemporary construction methods and growing adoption of budding technologies. Here is why.

Digitalisation is here to stay

The growth of artificial intelligence (AI) and the internet of things (IoT) have taken building methods to new heights. Stemming from the backbone of BIM, an expanding web of computerised surveying techniques and design methods is allowing construction professionals to streamline project workflows and collaborate like never before.

In fact, according to figures from a survey by Dodge Construction Network[2], half of the respondents now use BIM on 50% or more of their projects. BIM is one of the most influential trends in construction today and is working alongside newer technologies like computer vision (CV) that can process visual data and use AI to monitor construction progress, inform planning decisions and even analyse productivity.

The point here is that we are seeing increasingly innovative ways of embedding digital technology into modern building methods. The synergy between software in the office and tools used by construction workers onsite is set to flourish in years to come. Thanks to the growing power of AI and IoT, smart devices in the field are being seamlessly linked to cloud platforms and CAD software to improve collaboration.

We are in the heart of the 'fourth industrial revolution', and digital technologies will equip construction professionals to protect a brittle industry from the far-reaching impacts of issues like rising energy prices.

New toys to play with

Looking at some newer digital innovations, digital twins are a state-of-the-art technology to watch in 2023. Synching up with powerful AI, smart sensors can now generate virtual models in real time that learn from real-world sources and automatically update to register any changes in physical structures. These digital copies are supercharging BIM and CAD, creating a living, breathing model that keeps different teams working on projects informed and in sync. We are even seeing this technology used in collaborative projects across Ukraine[3] to build digital twins of entire cities.

In parallel, construction is adopting telematics to monitor and report on assets, ensuring they operate at maximum efficiency. Similarly, improved 3D scanning technology and CV are automating tasks like quality control and process optimisation, lightening the load on workers and reducing instances of human error.

AR is another stand-out innovation I think we will see more of in years to come as it allows field engineers to build with greater accuracy and agility. Construction AR lets workers prevent mistakes by visualising holograms of 3D design models and comparing them against physical structures in real time to identify inaccuracies. Using the latest engineering grade AR, which only XYZ Reality can provide, field engineers can perform inspections to build within 3-5 millimetre precision.

To support the uptick in digital adoption, advanced robotics are also stepping into the spotlight, utilising the array of AI-driven software now available. Drones with high-powered RBG and infrared cameras are being used for surveying, while other programmable robots are autonomously carrying out repetitive tasks. As the industry becomes more automated, the adoption of robotics in 2023 and beyond will help to minimise the effects of the troubling labour shortage.

1 https://www.creditsafe.com/gb/en/blog/reports/insolvencies.html#:~:text=The%20Construction%20sector%20remains%20the,all%20company%20insolvencies%20in%202022.
2 https://damassets.autodesk.net/content/dam/autodesk/www/industry/aec/bim/aec-smart-market-insight-2021-bim-digital-transformation-united-kingdom-ireland-en.pdf
3 https://buildindigital.com/ukraine-deploys-digital-twins-for-rebuild-effort/

Drivers of digital adoption in 2023

The growing pool of digital technologies in construction creates greater visibility across projects and reduces instances of reactive, energy-intensive rework (redoing work due to errors). Tools like AR-enabled headsets[4] are boosting productivity on construction sites, by as much as 40%[5] in some cases.

In construction, profit margins are tight and carbon emissions are high. It is crucial contractors utilise emerging digital technologies to increase efficiency and bridge communication gaps between workers in the field and office to eliminate miscommunication, errors and costly delays.

This link between teams is a huge step in revolutionising construction. It allows teams to tackle issues in the moment by drawing on valuable information and data available at the tap of a screen.

According to the World Built Environment Forum[6], over 70% of construction specialists agree digital transformation in construction is a top priority. ConTech's evolution is gaining momentum, and even relatively advanced monitoring methods, such as laser scanning, are being trumped by new technologies like digital twins and AR.

A future of better communicators

The ability to digitise information has transformed construction. Computerised information is more accurate, easier to readily distribute, and can be kept safely in data clouds. Big data is proving more and more valuable as information, such as material and operational energy costs, has become crucial to identify inefficiencies and improving building methods.

Ultimately, greater transparency across projects helps deliver high-quality builds with greater accuracy and lower risks by eliminating rework, and these benefits will be a core focus in developing current and new technology in the near future. Using AI-supported software and IoT-enabled devices, construction professionals can now produce a digital red thread throughout projects, helping facilitate a joined-up approach to work between designers, contractors, engineers and even clients.

To give a real-world example that will continue to provide value in 2023, cloud-based platforms working in tandem with AR create a direct link to BIM software so design updates can be mapped to holographic renders in real-time.

A light at the end of the tunnel

The latest digital technologies and advances in robotics empower contractors to build more accurately and sustainably with superhuman efficiency for lower costs, and further enhancements keep coming.

Investment in construction technology more than doubled from 2009 to 2019, and I anticipate there will be more to come down the track. The trend for growth in ConTech across the industry is clear as day and the potential of emerging digital innovations is erupting.

We live in a digital age where contemporary construction's most valuable asset is data, and digital innovations are helping to create more transparency whilst making it more accessible. It is an exciting time for the sector, and top contractors must keep an eye out for the latest tech coming down the track if they want to go for gold as we race through 2023. ■

4 https://www.xyzreality.com/
5 https://www.xyzreality.com/case-studies/remote-inspections
6 https://ensignonline.co.uk/digitalisation-in-the-construction-industry/
7 https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/rise-of-the-platform-era-the-next-chapter-in-construction-technology

DIGITAL CONSTRUCTION WEEK

EXCEL LONDON
17-18 MAY 2023

INNOVATION IN THE BUILT ENVIRONMENT

Register to attend DCW

Join innovators from across AECO to debate, discuss and share ideas to help build a more digitally enabled industry.

Discover

the latest technology to help you on the journey towards digitalisation

Network

with your peers to share ideas and experiences

Learn

from expert speakers and improve the way you work

@DigiConWeek
Digital Construction Week
@DigiConWeek

Organised by diversified COMMUNICATIONS

REGISTER FOR FREE

www.digitalconstructionweek.com

HEADLINE PARTNERS

AUTODESK Construction Cloud · PROCORE · BLUEBEAM · CAUSEWAY

GOLD SPONSORS

Bentley Advancing Infrastructure · GRAPHISOFT · thinkproject · DASSAULT SYSTEMES

Cutting waste – and costs – with architectural films

As 2023 begins, sustainability – be that environmental or financial – remains at the top of the agenda. Waste is discouraged and thrift is once again on the rise – but what does that mean for households and businesses planning refurbishments?

No matter how thrifty you are, there will come a point where your home or premises needs updating, either to keep up with trends or to deal with the effects of wear and tear. With the mantra of 'wrap, don't scrap', leading architectural films supplier Architextural has the answer, offering the prospect of a whole new look at a fraction of the cost – or waste.

Marketing manager Lindsay Appleton says: "Architectural films allow owners and designers to make the most of their existing furniture and fittings, which may still be structurally sound, and give them a new lease of life. A huge 32 per cent of landfill waste comes from the construction and demolition of buildings, so reusing what already exists has immediate benefits for both the environment and budgets. Reinventing furniture for example, by wrapping it with an architectural film not only helps to reduce negative environmental impact, but it may also mean that otherwise sound surfaces aren't being sacrificed for the sake of modernisation - we like to think of it as a secret weapon for sustainable designers."

Architectural films can mimic the look and feel of all sorts of materials, both natural and synthetic, at a fraction of the usual price, and are also far less time-consuming or disruptive. In fact, they are so easy for a qualified installer to fit that premises will generally remain open throughout – perfect for businesses that, particularly in the current climate, cannot afford any downtime.

They are created to be long-lasting and durable, making wrapping the perfect choice for high traffic areas in the home or in commercial premises. Lindsay says: "Not only can they extend the life of structurally sound surfaces, but they can also be used as an alternative to real wood, which protects the natural world through recreating the natural look and feel of wood grain without having to cut down trees. We are all more aware than ever before that our planet has finite resources, and so it is particularly important that we take steps to conserve them when and where possible."

Material benefits

It cannot be ignored that architectural films are mainly made from PVC. It is what gives them their amazing flexible and adhesive properties but PVC is not the most sustainable product on the market.

For Lindsay, the benefits far outweigh the negatives... "PVC gets bad press for not being the greenest choice out there; it is manmade, and involves a complex, chemical-heavy production process. However, it is long-lasting which, for use in homes and buildings, means it is far more sustainable on that basis than more natural wood, marble or finite substrates. It also helps to reduce waste, by giving a new lease of life to existing furniture that may otherwise end up in landfill. If people are creating the look and feel of real woodwith architectural finishes, it means trees are being left in their natural habitat instead. Interior design doesn't have to have to contribute to wider environmental issues such as deforestation."

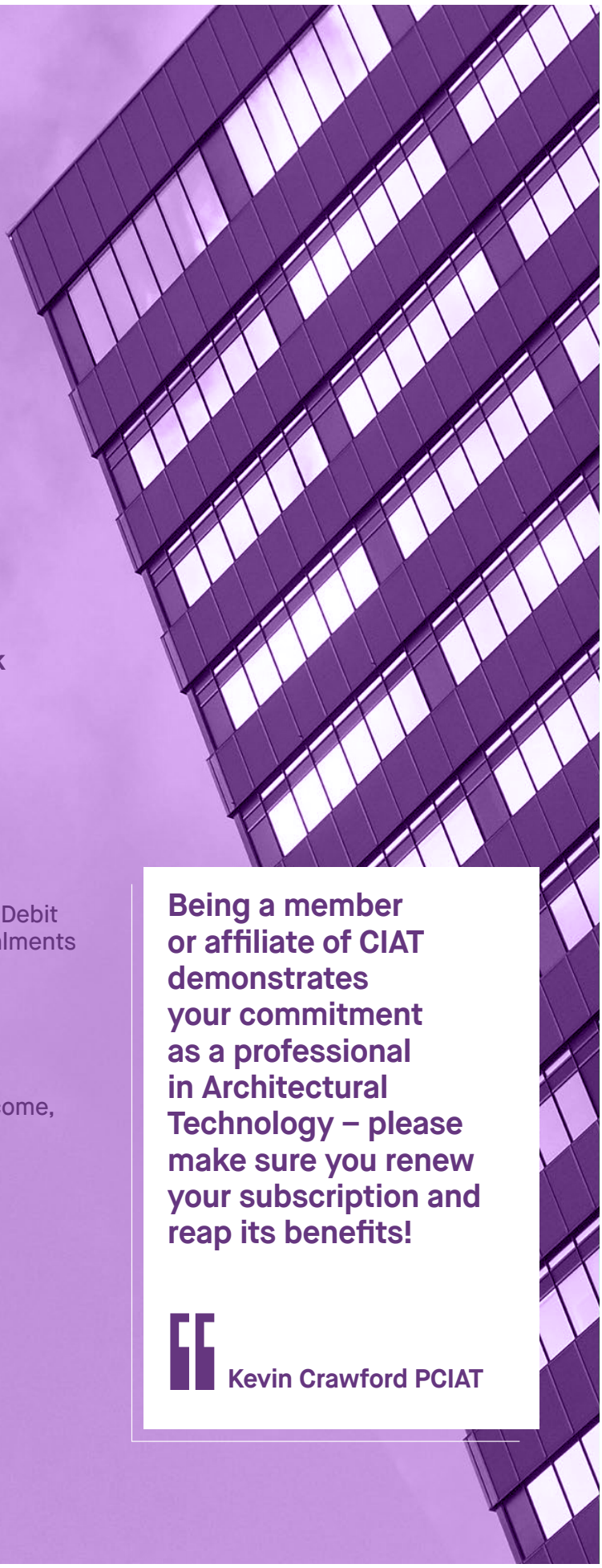
There are also a limited number of non-PVC films on the market, and, as appetite grows, there will no doubt be more joining them. In June last year, Architextural announced a partnership with Decal, introducing its PVC-free All Decor 2d range. The range includes fifteen natural and realistic finishes made from a textured non-PVC architectural film, free of halogen, plasticisers and formaldehyde components, making it ideal for applications where sustainability is key.

The lack of PVC does not lead to any loss in functionality; in common with its PVC counterparts, Decal All Decor 2d is suitable for application onto interior flat and simple curved surfaces such as ceilings, walls, doors and furniture, with guaranteed 10-year minimum durability for interior applications. Lindsay adds: "While PVC-free options are great, they are the icing on the cake really. Any project undertaken with architectural films is, by its very nature, sustainable, perfectly encapsulating the reuse and recycle ethos. We have been talking about the environmental benefits of wrapping, and refurbs with film, for years now and it is great to see the idea becoming more and more mainstream. As the cost of living crisis continues to hit homes and businesses, architectural films offer the perfect solution to cutting costs as well as waste – the best of both worlds."

For more information about Architextural's range of architectural films visit the website at architextural.co.uk ■

Subscription Renewal 2023/24

Look out for your renewal in the post and by email in May



Renewing your membership subscription could not be easier via direct debit, the website, bank transfer or credit/debit card.

Subscriptions are due for renewal on 1 May annually.

Paying your subscription

- Spread the cost by setting up a Direct Debit for payment in ten equal monthly instalments or one annual instalment.
- Pay online by credit or debit card.
- You may qualify for a concessionary subscription fee if you are on a low income, unemployed or retired.

If you have any queries then please contact finance@ciat.global

Being a member or affiliate of CIAT demonstrates your commitment as a professional in Architectural Technology – please make sure you renew your subscription and reap its benefits!

Kevin Crawford PCIAT

AACMs are an alternative binder to traditional Portland cement and can be used in a wide range of concretes and concrete products.

Time for designers to think again about going cement free

It is a fact - alkali-activated cementitious material (AACM) provides a real alternative to Portland Cement (PC). It is a product that delivers CO2e reductions of up to 85% at a time when there is more pressure than ever to reduce damaging emissions – so what is it that is preventing some designers from specifying a proven material with real green credentials?

Could it be that AACMs are not currently covered in the concrete specification Standards EN 206(1) and BS 8500(2)? There is a good reason for that – AACMs are not cement, a material used within concrete which is responsible for 8% of the world's CO2 emissions. This means that many specifiers are unsure of the best way forward – but that is all about to change.

Cemfree, a pioneer in the development of ultra-low carbon cement free products, has produced an extensive designers guide which shows how it is possible to specify AACMs that meet British Standards Institute (BSI) specification document – PAS 8820:2016(3).

The guide is based on extensive commercial use of AACM concrete and durability testing in compliance with the requirements of PAS 8820. The recommendations provided cover compressive strength, concrete cover to reinforcement, binder content for various exposure conditions, concrete strength classes, possible additional measures and much more.

It can be downloaded via this link: https://cemfree.com/file-uploads/Cemfree_specification-document.pdf and demonstrates why cement-free concrete has been proven to perform equally as well as PC across a range of different applications, a trend which is firing the attention

of building owners, specifiers and other construction professionals looking to reduce their carbon footprint.

With growing concerns over its impact on CO2e emissions, the construction industry is looking for more sustainable options. Alkali activated cementitious materials provide an innovative solution to these challenges, but slow-moving industry standards currently stand in the way of widespread AACM adoption.

AACMs are created at room temperature by combining an alkaline solution (this is called the activator) and a non-crystalline aluminosilicate material. The resulting products, such as Cemfree, have a significant environmental advantage over traditional Portland cement.

AACMs are an alternative binder to traditional Portland cement and can be used in a wide range of concretes and concrete products.

As the conversation around concrete and construction as a whole, increasingly trends towards carbon neutrality and carbon reduction, AACMs are not only effective practically, but offer a preferable carbon footprint, yet acceptance has been slow.

A reason for the hesitancy to adopt AACMs is believed to be due to the minimum level of Portland cement that is mandated within the relevant standard for concrete manufacture. The British Standards are respected and prescribed, currently leaving few opportunities for using alternatives that don't fit within them.

Against this background it is understandable why some specifiers would wish to be risk-averse and prefer to use the available standards and data to help them make a decision about which materials to use. As a result, this leads to the use of PC even when other, ultra-low-carbon materials would be suited to the project.

For companies such as Cemfree, it is all about challenging these existing standards. At present, for concrete mixes to qualify for the BS EN 8500, they must contain at least 20% Portland cement. As already mentioned, since AACMs are created without PC, this leaves products such as Cemfree unable to fit into any category.

Creating a comprehensive guide is a major step forward in terms of getting more architects to specify AACMs.

Most industry experts now believe that this is the ideal time to develop new industry-wide guidance and standards that support innovation and sustainability. By exploring the cement alternatives already on the market, construction professionals can work towards a cleaner, greener industry that works in harmony with the environment.

There are numerous effective, ultra-low-carbon materials available that work alongside cement to support the built environment. AACM products can help reduce CO2e emissions, but standards-related barriers currently prevent their use in some building projects across the UK.

In spite of these reservations Cemfree has already shown that when specifiers are prepared to work with them then it is possible to successfully incorporate ultra-low carbon AACM alternatives into many projects.

Chatham Station in Kent which officially opened in January 2023 is just one such example. It was the largest Cemfree Pour for Network Rail when first installed by BAM Nuttall in May 2020. The 300 cubic-metre continuous pour supports the foundation for a new step-free access.

The station was the first use of Cemfree on the UK rail network and, by eliminating the use of traditional concrete, saved approximately 62 tonnes of carbon from entering the atmosphere – the equivalent of 230,000 miles in an average-sized diesel car.

Commenting about the project, Huw Jones, BAM Nuttall Divisional Director, Rail said: "By working with Network Rail we gained product approval for this revolutionary product. It means we can continue to deliver vital railway improvements with less impact on the environment."

"Seeing this product being used on site underlines our commitment to developing innovative sustainable solutions for Britain's railways and I look forward to seeing other projects making use of it. It has the potential to make a huge contribution towards the reduction of carbon emissions across the construction industry."

Sarah Borien, Head of Environment & Sustainability Network Rail, agreed, commenting: "This is a great example of how we are working with our supply chain to reduce carbon emissions and contribute to our common sustainability goals. At Network Rail Southern, our sustainability plan includes a number of environmental and social priorities – one is focused on finding sustainable alternatives to our common construction materials. Cemfree concrete has reduced our embodied carbon by 83% in this instance and shows how our capital projects can make simple changes as part of our journey to carbon net-zero."

BAM is currently investigating further opportunities to make use of cement-free and low cement products across sites in the UK and such was the success of the project that Aaron Lucid from Cemfree, was awarded the title of ICE Carbon Champion by the Institute of Civil Engineers (ICE).

The ICE Carbon Champions programme recognises decarbonisation efforts from across the civil engineering community and provides recognition for project owners as well as best practice insights and expertise for the wider industry.

The technology is proven and we now need the ruling Standards authorities to accept that products such as Cemfree are here to stay and offer a real green alternative. They need to be recognised as such, so that the industry can specify and use them with confidence.

While cement will always been needed within the industry and will never be fully replaced, architects and other key specifiers should challenge the industry, and reduce embodied carbon across their building projects. A major solution is now available to reduce damaging carbon emissions, but how long do we have to wait before the construction industry finally wakes up? ■

Preserving the Tower of London's heritage using lime mortar

Superbloom is a natural new landscape surrounding the Tower of London. For the first time, earlier this year, visitors were able to walk through the moat and admire the twenty million flowers that filled and transformed the Tower's moat.

To support visitors in accessing this area and the tower's moat, a new ramp was needed.

"We were asked to supply labour and the material for the construction of a new access ramp into the moat," explains Richard Flegg, Managing Director, Kent Conservation & Restoration. "The total number of bricks needed for the project was between 30,000 to 40,000, which we laid with a premixed lime mortar from Lime Green."

The length of the ramp allowed visitors to descend into the depth of the moat below, offering an accessible route for the spectacle's thousands of visitors.

Finding the matching product

The Tower of London, like many other historic buildings, used lime mortar in its original construction.

"We knew that preserving the history of the building, as well as the nature of the building, would be a challenge," comments Derek March, Managing Director, Brick & Lime Supplies.

"We were given the analysis of the original mortar to spec, so the mortar we used would be as close to the original as possible. For this, we sent analysis to Lime Green, who quickly produced a sample that we then supplied to our contractor, who was happy with the match. Lime Green's hydraulic lime mortar matched the original

tested specification perfectly, and considering the size of this project, it was great that mortar was supplied in tonne bags. This made it easier for us to handle less units, and we could carry out the work much more easily."

The right strength for the job

"As well as the colour of mortar, we needed to find the right strength and right aggregates," continues Derek.

"If you think of the Tower of London, it is a world heritage site built in 1066, so it was extremely important that everything was done accurately. Lime Green's mixing and computer-generated programmes that evaluate the strength prediction performances of various lime mortar meant we could ensure this was the right product before we began."

A straightforward product

"There are challenges in any construction project, from delays to general account issues, but it is always good to have a quality product you can rely on to make the project go smoothly," comments Richard. "Thanks to the main contractor for working with us to get all of the materials into to the moat using their machinery, it was not a difficult job."

"Lime Green provides good quality hydraulic lime mortar, which I have tried and tested for 20 years, and I have never had any issues or problems with the product," concludes Richard.

"The Tower of London is a prestigious landmark building, and we wanted high-quality, long-lasting products from a reliable supplier," comments Derek. "We love working with them because they are so innovative, and we really do feel privileged to work with the team on such great projects."

Lime Green has been a key supplier for other heritage projects, such as Shakespeare's Globe Theatre. It is known for promoting the various uses of lime in building work, which stands the test of time.

"It was a pleasure to see our Hydraulic Lime Mortar used on such a prestigious project, and we absolutely love to see so many projects using lime products. We have loved working with Richard and Derek on the Tower of London Superbloom moat project, and we cannot wait to work with them again," expresses Simon Ayres, co-founder and Managing Director, Lime Green Products. ■

The total number of bricks needed for the project was between 30,000 to 40,000, which we laid with a premixed lime mortar from Lime Green.

Designing for accessibility

Words by Fiona Walsh BArch FRIAI RIBA ARB, Principal Architect, DDS and Atlantic Fellow for Equity in Brain Health, Global Brain Health Institute

We are currently designing and building environments which are not supporting equitable access for all. In many instances, the environments are creating stress, anxiety and even fear for many people living with cognitive and sensory impairments.

An estimated 40% of the population have cognitive and/or sensory impairments (CSI). CSI can be associated with ageing, dementia, autism, mental health conditions, ADHD, PTSD, stroke, and sight and hearing deficits, amongst others, and may require additional design considerations to design fully inclusive facilities.

In a hospital or care home setting where people cannot remove themselves, their health and wellbeing can be adversely affected to such a degree that sedation and antipsychotics are used to compensate for poor design.

Children with autism and ADHD react to environmental triggers in school environments that can cause behavioural challenges resulting in exclusion or additional medication. This is the reality for millions of people every day.

There needs to be greater understanding that we engage and experience our surroundings through our senses and cognitive abilities. To design to meet the needs of people with invisible disabilities we must first understand the challenges they face.

Cognitive Impairments

Reduced cognitive ability can result in difficulties with memory, reasoning, judgement, planning, focus and decision making. This can lead to a person experiencing difficulties in finding their way around and engaging with their environment and the people within it.

Being aware of the challenges that cognitive impairment poses for people, we can design to support their needs and reduce the stress and anxiety they experience in poorly designed environments.

Poor design can accelerate both functional (ability to cope with everyday living) and cognitive decline which can severely affect a person's dignity, autonomy and independence.

Sensory impairments

Sensory impairment can affect sight, hearing, taste, smell and touch. This can impact how a person experiences and interacts with their environment. The general perception

is we engage with our environment through sight, but we underestimate the input we rely on from our other senses to interpret the world around us.

For example: blind and partially sighted people rely on other senses to compensate for their visual impairment, to make sense of the world and to help navigate it. They use aids such as canes and guide dogs to extend their cognition. 80% of the visually impaired can use their remaining sight to interpret spaces if they are designed to support visual understanding. Through inclusive design interventions, we can support all the senses to assist understanding.

Eight years of research in the field of design for CSI has shown me that whilst each disability may have its own unique symptoms and the way they present, there are two primary design principles that benefit all. It should be noted that the principles may appear simple and obvious, but the execution and science to achieve optimum outcomes is complex and multifactorial.

Light reflective values and contrast are starting points, but inclusive access can only be achieved if a systematic inclusive design approach is built into the project from inception through to completion.

Principle 1 - Reduce sensory clutter

Our primary goal should be to deliver relevant information without overloading the senses. Not creating auditory or visual clutter which will confuse, distract and ultimately lead to frustration and withdrawal. We can use design interventions including light, colour, contrast, texture, acoustic design to compensate for lost abilities and support people to better understand and read their environment.

All the senses should be considered and supported to achieve optimum occupant satisfaction, comfort, access and use. Some basic considerations include:

- Hearing: Optimum acoustic environment, support communication and reduce background noise
- Vision: Enhance visual clarity and reduce visual clutter
- Olfactory: Optimum air quality, pleasing olfactory cues and eliminate unpleasant smells.
- Thermal: Control temperature and air movement

Principle 2 - Reducing Complexity

We should design intuitive, predictable, legible and familiar environments, aiming to reduce overall design complexity. Visual access and spatial proximity are fundamental requirements. We can also provide cues, prompts and signage to support memory, orientation and wayfinding.

People with cognitive and sensory impairments can find it difficult to understand and filter multiple simultaneous sensory stimuli and may become confused or overwhelmed. We can edit out the irrelevant and emphasise what is important, simplify and design intuitive spaces, thus supporting understanding and remaining abilities.

We have all at some time experienced an environment in which we feel uncomfortable, overwhelmed or even anxious or scared. We must recognise that for some the threshold of tolerance for poorly designed spaces may be higher than that of a person living with CSI. Some people can compensate and adapt while others may be hypersensitive to their surroundings. If we design for people who find it difficult to adapt to their environment and need additional support to stay actively engaged members of our community, we design well for everyone.

Barriers to inclusion and adoption of design principles

There is a lack of awareness and understanding of the issue and the scale of the need within the design profession and the general population.

As designers we must put equal emphasis on aesthetics and inclusion. The former creates first impressions and the latter creates lasting impressions based on ease of use, comfort, accessibility and user satisfaction.

Accessibility ensures we design for a larger percentage of the population. We need to adapt our design practices and guidance to reap the benefits that inclusive design can bring. By not embracing this, we are in essence creating redundant buildings of the future and depriving people of their independence, autonomy and human rights. We must change our design practices if we are to create inclusive environments where people can thrive rather than decline. A new era, a new norm is required.

Common misconceptions when designing for cognitive and sensory impairments:

1. Inclusive design implies additional cost

For new buildings or planned refurbishments, this is not the case. If the expertise is included from inception of the project, sensory and cognitively inclusive environments can be constructed at no extra expense.

2. The designs affect the aesthetics

If a skilled and knowledgeable designer is engaged the aesthetic will not be adversely affected. All supporting interventions can and should be invisible to the untrained eye. A skilled and informed designer can incorporate inclusive elements and design interventions that work seamlessly into the design without compromise.

3. Required different solutions for different disabilities

Reduced complexity and sensory cutter are common requirements across the CSI population. It is also established that neurotypical and non-CSI individuals share a preference for more peaceful, less complex building with fewer stimuli. Inclusive design works well for everyone.

Inclusive design is a specialist design field which has evolved and advanced greatly in recent years. I hope that designing for the needs of those with cognitive or sensory impairments will become a “new normal”.

Looking to the future, I hope people living with CSI can live with greater dignity and independence within environments designed to support their needs. ■

Is it time to rethink the design and specification of ground floors?

Words by Rob Firman, Technical and Specification Manager, Polyfoam XPS

The ground floor of most buildings might seem like a relatively simple part of the building fabric to design and specify: an appropriate supporting structure for the ground conditions; thermal insulation to meet the required U-value; a protective floor covering and, if required, a floor finish.

Creating a built environment that is more flexible and adaptable is going to be a crucial part of our net zero future. Somehow, we must balance the increasing demand for new construction against finite resources and the essential need to reduce greenhouse gas emissions.

Provide a couple of membrane layers in the right place within that build-up and you should have a perfectly functional floor.

Except, it is surprising how often that does not turn out to be the case. Common technical enquiries where something has gone awry with the floor include the following examples:

- One type of insulation has been specified, but the structural engineer has identified that a better compressive strength is required. The specifier or contractor does not think they can now meet the required U-value while also providing the necessary loadbearing performance.
- A contractor is unsure whether they can install the thermal insulation above or below the damp proof membrane (DPM). Or, worse, they have installed it incorrectly but want reassurance that the floor will still perform as needed.

Issues such as these increase the likelihood of performance gaps occurring. The in-service performance of the floor – be that thermal, loadbearing or moisture resistance performance – does not match what was intended at design stage.

If there is a struggle to make floors perform as intended in the first instance, then that has implications for addressing one of the most pressing issues currently facing the construction industry: how do we make buildings more adaptable for the future?

Why is adaptable design important – and why is it not current practice?

Creating a built environment that is more flexible and adaptable is going to be a crucial part of our net zero future. Somehow, we must balance the increasing demand for new construction against finite resources and the essential need to reduce greenhouse gas emissions.

Prolonging the useful life of buildings, minimising demolition, and extending the life of components across multiple projects is going to be part of that balance. Specifying floor constructions that can serve a range of building uses could do just that. The floor could be left unaltered, even if other elements of the building fabric above do have to be changed.

At the moment, it is often easier to demolish a building and start again than to try and work with the existing fabric. But that is not compatible with climate and biodiversity emergencies.

Existing buildings have a lot of embodied carbon tied up in them. Demolition sees the carbon already emitted effectively wasted, while more emissions are incurred through the new construction. Demand for new buildings also puts pressure on finite reserves of raw materials, rather than looking at how the resources we have already extracted can be used more efficiently.

Another issue with current floor build-ups is that traditional design and construction processes mean most buildings are essentially prototypes. The materials and installation techniques might be similar across different projects, but repetition and total consistency is not possible. As a result, even two 'identical' buildings will be put together in a slightly different way and perform differently in use.

Extending a building is relatively simple so, in that sense, buildings are adaptable – but only if they need to be made bigger to suit growth or expansion.

What if a building ever needs to be made smaller?

A key issue with 'familiar' construction materials and techniques is that they can be put together on site but taking them apart again is almost impossible – or, at least, undesirable. It might be technically feasible but is rarely economically feasible.

What might ground floor build-ups look like in adaptable buildings?

There are exciting developments being trialled across the construction industry that aim to overcome some of the challenges and risks in traditional construction.

Design for manufacture and assembly (DfMA), and construction platforms, represent solutions that are likely to form the future of our built environment. Floors are likely to be constructed from panels or 'cassettes' that are compatible with, and easily fixed to, the primary structural frame. This will remove the need for wet processes on site, like mixing and pouring concrete slabs and screeds.

Until such time as those solutions become the norm, however, how can traditional ground floor constructions be specified with greater adaptability in mind?

A traditional floor cannot be 'assembled' or 'disassembled' so that its area changes to match a larger or smaller building. However, it is possible to ensure that it is capable of bearing a wider range of loads, and so be capable of serving different building uses.

One way to look at it is to consider how a ground floor could be specified to ensure that it can be used as much as possible – including effectively being reused if the occupation of the building substantially changes.

How can the floor constructions described in BS 5250 help?

BS 5250:2021 *Management of moisture in buildings* is the ideal starting point for thinking about the best floor construction options for the long term. The code of practice looks at buildings holistically with regards to moisture, which is vital when aiming to achieve building fabric with an extended useful life. Its recommendations for floors cover the following four categories of construction.

1. Groundbearing floors with DPM

This type of floor typically consists of a concrete slab that is cast onto, and supported by, a prepared base – usually sand-blinded hardcore. The DPM acts as a barrier to moisture from the ground.

The DPM should be positioned in the floor build-up based on the thermal insulation material used. Many thermal insulation materials are affected by moisture and therefore have to be installed above the DPM, in order to ensure that they deliver their intended performance.

The combination of insulation and DPM can be positioned above or below the concrete slab. Figures 3 and 4 of BS 5250:2021 clearly illustrate all of the ways in which this type of floor can be built up. The decision about where to place the insulation layer relative to the concrete slab depends on the intended heating regime of the building.

2. Groundbearing floors without DPM

In modern construction, with the possible exception of some historic buildings, a new floor should not be constructed without a DPM. This type of floor is therefore generally only found in existing buildings, is very unlikely to have any thermal insulation, and is outside the scope of this article.

3. Suspended floors

Suspended floors separating a conditioned space from an unconditioned void or space should feature thermal insulation.

At ground level, most new suspended floors are a concrete deck (such as a block and beam system, or a pre-cast slab), with timber joist floors being found in older properties. The requirement for a DPM depends on the design of the floor and the ground conditions. The thermal insulation is not in direct contact with the ground.

'Suspended floors' also deals with intermediate floors, including those over unconditioned spaces, which is again outside of the scope of this article.

4. Basement floors

The detailing of basement floors (and walls) depends on the ground conditions on site, whether the basement is new or existing, how the basement will be waterproofed, and the intended use of the basement (including moisture generation inside the room(s)).

Like ground bearing floors with a DPM, if the thermal insulation is to the outside of the basement structure and in contact with the ground, then it needs to be capable of retaining its thermal performance even when exposed to moisture.

Specifying insulation for 'adaptable' ground floors

In ground bearing floors with a DPM and suspended ground floors (and basement floors where appropriate), the specification of appropriate insulation can deliver long-term thermal, loadbearing and moisture resistance performance.

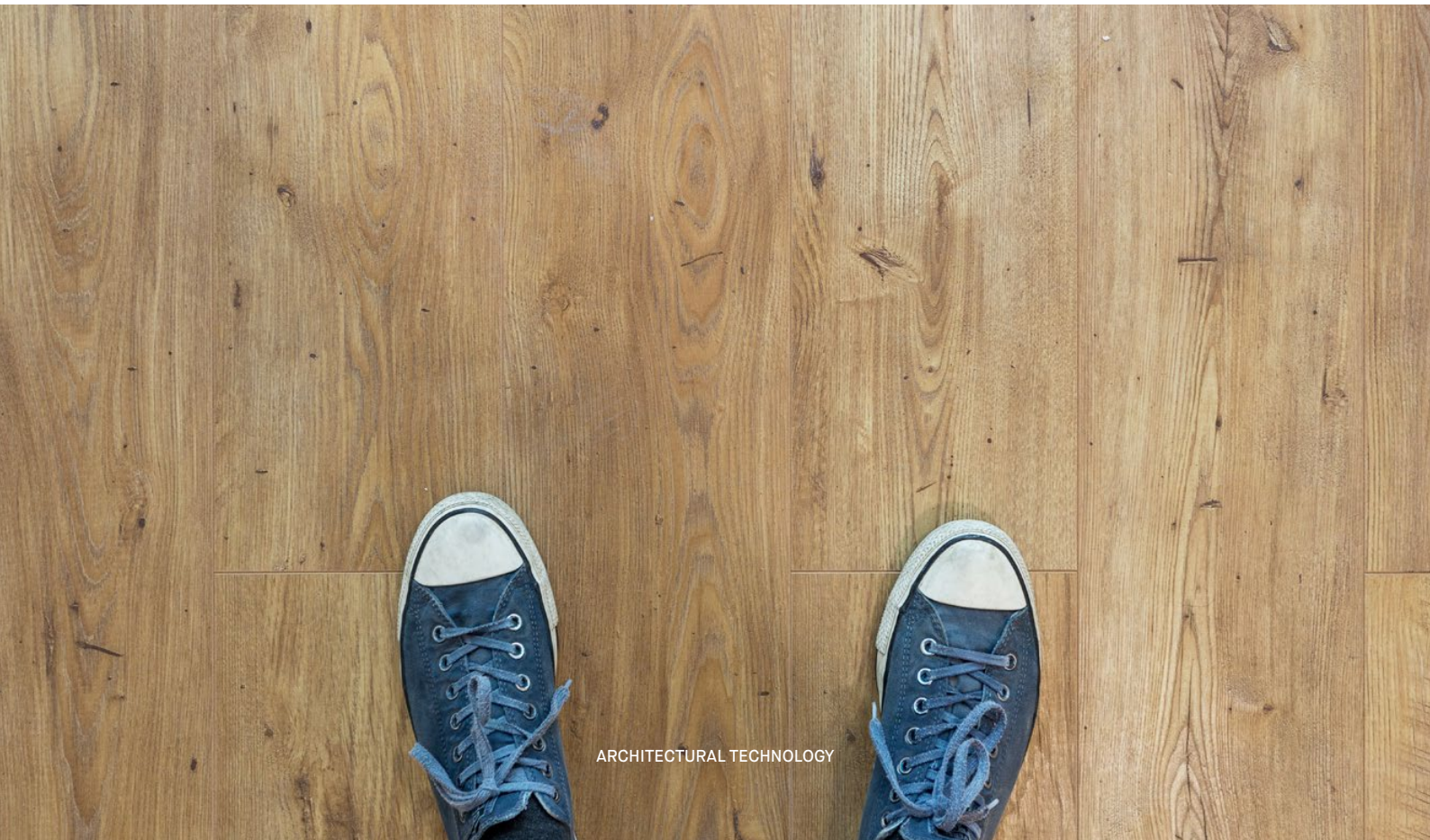
Extruded polystyrene (XPS) offers an ideal balance of thermal performance, compressive strength, robustness and moisture protection. Its loadbearing capabilities mean it is commonly specified in residential, commercial and industrial buildings alike.

XPS requires only a minimal increase in thickness to achieve the same U-value as other lightweight foam boards, which offer slightly better thermal conductivities but less loadbearing capability – and therefore less flexibility in the types of floors they can be specified in.

Another advantage of XPS is its moisture resistance, meaning it can be installed directly on the ground with the DPM over it. The floor slab and floor finish can then be specified to suit a range of potential future uses.

Conveniently, the insulation will never need to be disturbed, regardless of any work carried out to renew the internal floor finish. It will therefore continue to deliver the intended U-value and the required loadbearing, protected by the floor slab regardless of construction work carried out above. It can therefore deliver a floor capable of serving not just one use, but multiple uses for the same building.

Polyfoam XPS's Floorboard range is suitable for different types of ground floor construction. Find out more, and view our online CPD, at polyfoamxps.co.uk ■



Taking the plunge! A designer's role in swimming pool design

Words by Dan Adams, Clear Water Revival

The popularity of home swimming pools over recent years has soared. The 'lockdown years', coupled with glorious summer temperatures, provided a period of reflection as homeowners adopted a new way of living. Coupled with an increase in home exercising, these factors have combined to create a growth in demand for swimming pools. In fact, according to trade body SPATA, there are now 270,000 private pools in the UK. Recent research shows that searches for properties with pools increased by 49% in 2022*.

A successful pool installation can add both a striking visual focal point for your project and an added functionality which sets a home apart. However, they are not without their complexities. A robust process for integrating a pool into your project, using the right specialists at the right time, can be the difference between a pool being a defining centrepiece that the clients will love, and a laborious project that does not quite deliver enough to justify its cost.

The following guide breaks down some of the key things to consider when designing a pool, with some ideas on how to make the design process both enjoyable, and comprehensive.

Where to start

With many different available approaches, swimming pool design and seamless integration can be complex. You will need to consider many technicalities to get the balance right between beauty and practicality.

We are often asked what the 'best' build method, size or heating system is. The answer, of course, is that it depends on what the client needs. For some, size matters. For others, running costs are more important. So it is vital to assess likely usage before starting the design, and preferably before planning permission is granted, to avoid revisions later.

So aim for a detailed brief, and do not hesitate to speak to a pool specialist early, as they will understand the complications and cost implications.

What are the key characteristic of a great pool design?

No matter what your client's brief is, there are certain things which will universally contribute to a great pool design. We have broken down a few based on fifteen years of pool design and construction:

- Filtration (the water!)
- Build methods
- Heating
- Maintenance
- Aesthetics

Filtration

What is the most important characteristic of a swimming pool? The water! Pool design often focuses on physique and finishing first and foremost. However the quality of water, the impact on client experience and health is, in our view, paramount.

Finding a low maintenance, affordable, functional, beautiful and healthy solution has, in the past, been tricky. For decades designers have gone for chlorine, ozone or another chemical disinfectant process to keep the water clean. However, more recently, clients are becoming discerning about the impact of these chemicals on the human microbiome - the good microbes that keep us healthy. They are looking for new solutions which nurture holistic health.

We know how potentially harmful chlorine is for the skin, respiratory system and gut health. This leaves homeowners with pools stuck in a 'wellness paradox' – wanting to exercise for health and fun, but bathing in chemicals that could compromise the experience.

Chlorine pools can be expensive to maintain, too, and although they are still specified in high-use pools, for private owners the demand for alternatives is growing.

A natural evolution: mineral water pools

The first natural pools arrived in the UK in the early 2000s and used plants and gravel beds to filter the water. They were great for environmentalists and those with plenty of time to maintain the pools but they could not be heated, were onerous to look after and had unreliable water quality.

The best of both worlds - mineral water pools and 'beneficial bacteria'

To combat these early drawbacks Clear Water Revival, founded by mechanical engineer Andrew Cox and Aquatic Ecologist David Nettleton, spent ten years conducting R&D into natural filtration systems which did not rely on organic plants, could be heated, and could be designed flexibly, indoors or outdoors.

The result of this research (in partnership with the University of the West of England and Cranfield University) is the latest generation of pools using 'mineral water filtration'.

Incorporating cutting-edge filtration technology, mineral pools integrate a five-stage process that uses a living microbe biofilm, ultra-fine filtration, UV light and a water mineraliser to ensure nutrients and pathogens are removed from the water and beneficial minerals added.

This unique purification process uses billions of microbes to filter nutrient content from water so that nothing unsavoury can grow in your pool. In conjunction it uses spa minerals like selenium and magnesium, helping to produce superior mineralised water that revitalises skin, hair and body.

Mineral swimming pools appeal to clients who want a natural, freshwater experience that can also be heated for comfort and used all year round. The filtration equipment used within mineral swimming pools is robust, well tested and delivers the water quality expected in high end pool projects.

Whichever filtration method is specified, it is always a great idea to consult with a pool specialist pre-planning to ensure that adequate plant and machinery space has been identified so that no post planning plant room redesigns are required.

Construction methods

Bespoke or one piece

Bespoke solutions offer designers the chance to create a unique one-off pool for their clients - design without compromise. Bespoke is the more expensive option, but the craftsmanship involved delivers an unrivalled finish and full flexibility when it comes to blending the pool into the rest of your landscape or interior scheme.

One-piece pools on the other hand, are the fastest, most economical way of building a pool. Our one-piece shells are not 'moulded', so corners look architecturally crisp rather than soft and round and they are available in a range of sizes, colours and configurations to match almost any garden design. The pool shell is constructed off-site then delivered on the back of a lorry meaning a fast and straightforward installation. As a result, you do not have the typical time for wet-trades (concrete/tanking/tiling) so this method can cut weeks out of a build or landscaping schedule while maintaining a very high end finish.

Aesthetics - the beauty in swimming pool design

The aesthetics of a swimming pool are hugely important. We believe that pools should be designed with the intention of being permanent features in a home and should be sympathetic to their surroundings. A focal point rather than something to hide.

All clients are different, and in some cases bright, turquoise water reminiscent of a Caribbean lagoon is their goal. Often more subtle colours work better in the home counties or the Cotswolds, but no matter the aesthetic a good pool designer will aid the choice of materials that deliver visually as well as functionally. Not all tiles and

materials can function in water, so care has to be taken to make a pool look more like a water feature than an interruption in the landscape. Remember details such as edges, water level, cover concealment and which materials will last when submerged in water.

Heating

Of course, except for cold water swimming enthusiasts, most clients will only use a pool regularly if it is heated. Traditionally, heating has been done by gas or oil boilers but more recently heat pumps are the go-to solution – the are electric, simple to install and efficient.

Just remember the space requirement. Air source heat pumps in particular need generous clearance distance for airflow and this will need factoring into the spatial design process early on. Remember you may also need a renewables consultant if you are planning to use solar PV as an electrical source.

Maintenance

Maintenance is unglamorous but vital to consider, going hand-in-hand with the filtration solution - the better the system, the lower the maintenance burden.

A good cover is important to consider, too. Avoiding debris minimises the filtration requirement, helps retain heat and reduces running costs, making renewable heating methods more viable.

There are many different types of cover on the market, offering a balance between functionality and minimal aesthetic, particularly when retracted. An automatic cover allows quick and easy opening, while slatted covers and safety covers are good too, but too complex to discuss in full here.

Summary

Swimming pools are a significant investment for clients and should be carefully designed so that they deliver the enjoyment that makes them worthwhile. Where possible, swimming pool experts should be part of the design process from the pre-planning stage to ensure the best outcome for clients and a stress-free design process for designers.

Filtration is a key element of swimming pool design which should not be overlooked so designers should be aware of the impact that each method has on their client's budget, wellbeing and build requirements. Make sure to allow adequate plant room space! It is not an exciting use of space but generally, the larger the filters the better the filtration quality, so small plant rooms often constrain you ability to design an adequate filtration system.

Mineral swimming pools are the future for homeowners. They provide a great synergy of crystal-clear, clean water that supports the human microbiome without the need for chemicals or the maintenance of plant and pond life. ■

What is an Environmental Impact Assessment (EIA) and why should every project need one?

Words by hn Rodgman, Managing Director, Borehole Solutions

As both climate change and sustainable living systems continue to take centre stage across the build industry, the impact of both humans and businesses on the environment is becoming increasingly scrutinised. The build industry, in particular, has long been prone to criticism for its significant contribution to both global carbon emissions and industry wastage, so it is unsurprising to see the growing pressure from communities, activists and governments alike prompt the instigation of Environmental Impact Assessments (EIAs) as a critical component of any project's planning stage.

Whilst these regulations only legally apply to specific larger developments, such as power plants or chemical works, they are quickly becoming a staple throughout the industry as a whole, and understandably so. To help shine a light on why, John has provided his insight into the process of conducting EIAs, whilst also commenting on the numerous testing services available to contracts, the role they play in conservation, and more.

What is an EIA?

As the name suggests, an Environmental Impact Assessment is primarily used to determine whether any environmental issues may arise from the proposed project or development, including, but not limited to, groundwater quality, contamination and damage to the native ecosystem. Developments which fall within 'Schedule 1' of the EIA Regulations 2017 will always require an EIA as a

prerequisite, whereas those in 'Schedule 2' may require an EIA depending on the likelihood of negative effects on the environment occurring. The scope of these assessments, however, is incredibly broad, so chances are you will have to fill out an EIA of some description to carry out the majority of projects.

The five processes involved in completing an EIA

As outlined by the UK Government's regulations, there are five stages to any Environmental Impact Assessment. Firstly, a general inspection is made of the proposed development to ascertain its environmental impact and whether a full assessment will be required. Should this be the case, the second process – scoping – then outlines the extent of the issues which need consideration, both on behalf of the developer and the local planning authority.

In instances when an EIA is deemed necessary, the next steps are the preparation and submission of an environmental statement. This statement lays out in more detail any probable environmental impacts that could arise, as well as a further insight into the proposed use of the development, potential emissions and how the project is expected to comply with planning policy. The submitted environmental statement must be made available for public viewing.

Finally, it comes down to the decision-making process. In the majority of situations, upon careful consideration of the project's benefits and environmental drawbacks, local authorities will determine whether or not to proceed with the proposed development. In larger and more public projects, however, it has occasionally been the case for the Secretary of State to have a say in the outcome of the decision.

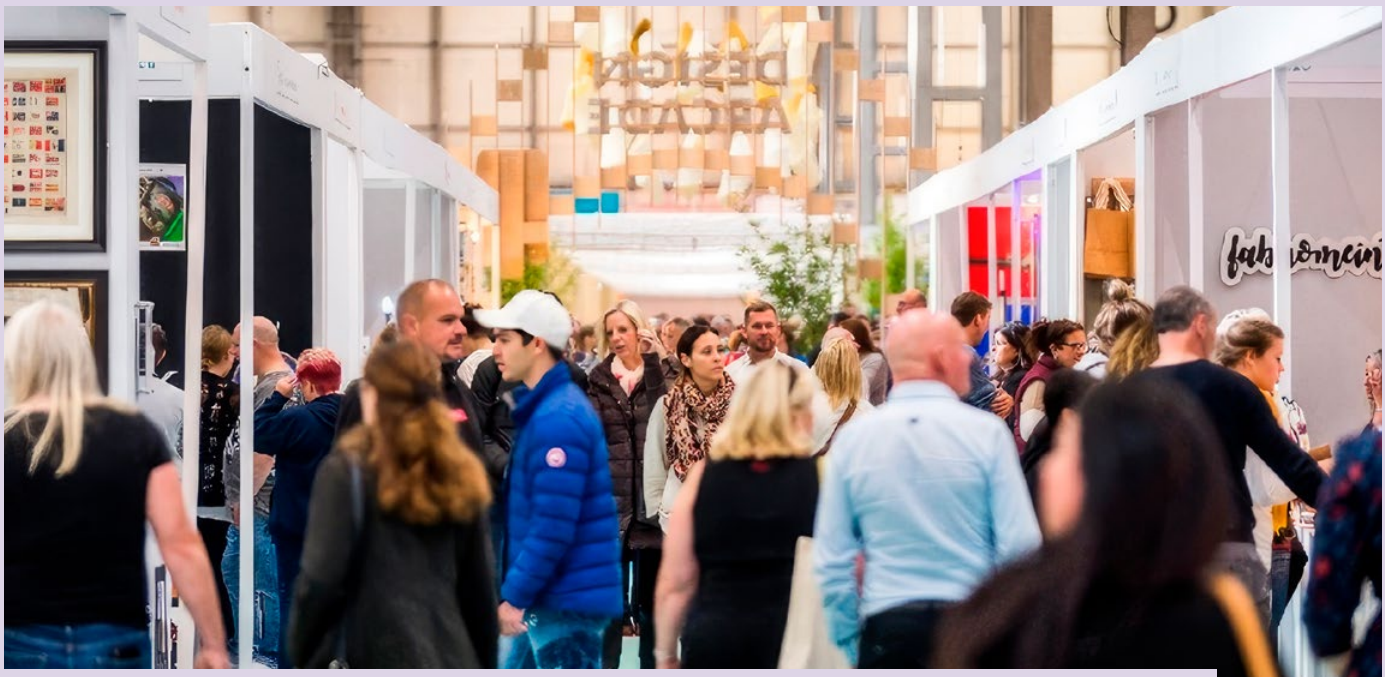
The role EIAs play in environmental conservation

The objective of an environmental impact assessment is by no means to halt the actions of these developers and their proposed projects, but rather to bring about changes to minimise negative environmental impacts before development can begin. By identifying and addressing these potential externalities at an early stage, EIAs contribute to sustainable development by identifying new and innovative ways to achieve environmental objectives that are not simply remedying the issue once it has already occurred.

EIAs can also make valuable contributions to future developments by helping to guide decision-making towards greater sustainability in the long tun. Whether that is exploring the possibility of implementing environmentally-conscious features or infrastructure alongside various developments, how to design future projects to better avoid these negative impacts, or something else entirely, environmental impact assessments are, and will continue to play, a major role in project requirements going forward.

What testing services are there?

Prior to the submission of an environmental impact assessment, it is not uncommon for developers to undertake a range of testing procedures to establish the state of the environment prior to development and identify solutions to support its remediation, alongside minimising the project's ecological impact. In many cases, this may include sample testing, to collect and examine high quality samples of soil; contamination testing, to sample the site for the presence of hazardous substances, such as asbestos; PCB and heavy metals; or Waste Acceptance Criteria (WAC) testing, to determine the composition of organic material and how its disposal will minimise any environmental impacts, as a few examples. ■



Grand Designs Live London ExCeL 2023

For a limited time only, we are offering free tickets for **Grand Designs Live London ExCeL 2023 taking place between 29 April – 7 May.** This must-visit event is packed with inspiration for those looking to find information and learn everything you need for your very own Grand Designs project.

Be influenced by over 400 exhibitors, spanning across four different sectors: build, kitchens and bathrooms, gardens and interiors. Discover designers, building suppliers, kitchen designers, as well as unique bespoke furnishings and designs alongside original pieces of artwork and much more.

Alongside this, we offer an expert advice zone where specialists are available all day for a sit-down one-to-one session, ensuring you will have all the solutions to your building and renovation problems. These consultations are available on a first come, first serve basis throughout the show and visitors are encouraged to bring along their plans, drawings, budgets, and questions to make the most out of their session.

Further to all this, live talks will be taking place where you'll be able to listen to an array of industry experts at the Interior Stage, Grand Magazine Theatre and Sustainable Future Theatre. Grand Designs TV presenter, Kevin McCloud and the grand designers from the show will also be talking on stage.

Your Grand Designs Live ticket will allow you free access to Green Living Live, which runs alongside the show. This is an inspiring and educational event, dedicated to showcasing eco-friendly products and services from companies that put sustainability at the heart of their business. ■

To book your tickets
visit granddesignslive.com and enter the code **CIATGDL23.**

BOOK NOW

https://gdllondon.seetickets.com/tour/grand-designs-live-excel?OfferCode=CIATGDL23

T&C's - This offer is available for standard tickets only to Grand Designs Live London 29 April – 7 May 2023. Tickets need to be claimed before 07/05/2023.

Address: Royal Victoria Dock, 1 Western Gateway, London, E16 1XL

A GRAND DAY OUT FULL OF IDEAS AND INSPIRATION

29 APRIL – 7 MAY | EXCEL LONDON

BOOK AT **granddesignslive.com**

SPONSORS

HYDROPOOL hot tubs · swimspas | Quooker | Studio Charrette | energy | Wickes | Dowsing & Reynolds | dfs

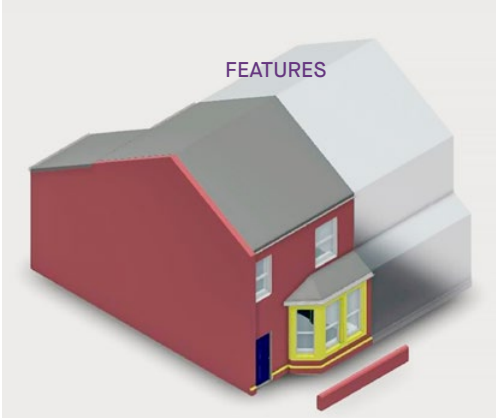
PARTNERS

GRAND DESIGNS MAGAZINE | NACSBA | Federation of Master Builders

T&C's: Offer valid on standard tickets only and must be booked before 7 May 2023. Tickets are valid on any one day between 29 April - 7 May 2023 only. Grand Designs Live is organised by Media 10 Ltd. Grand Designs is a trademark of FremantleMedia Ltd. Licensed by FremantleMedia Ltd.

#GDLive

A Media 10 Event



There's no BIM like home Part 17

Words by Dan Rossiter FCIAT, Chartered Architectural Technologist

AT Journal continues its exclusive access to serialise Dan's blog on how he used BIM to produce an information model of his home.

After revisiting my BIM Execution Plan, I am taking the final steps before I complete my architectural graphical model and produce its associated BIM Level 2 deliverables.

When forming my employer's information requirements, I considered the purposes I was going to use this information model for as well as the associated data requirements.

It states within BS1192-4 that:
In federated BIM (level 2) projects, information for COBie is likely to be available from the models, structured specifications and other schedules. (4.2.2 Note 1)

So as the model cannot hold this information effectively, I have created a project document to schedule this information; my project contract sheet. This sheet has been set up to be used to capture the contact information of all project participants and has been aligned to the COBie structure so that the schedule can be easily used to populate contact worksheet after being exported. Some might call this cheating. A project contact sheet should be formed for project anyway, so why not align it to COBie and use it as the schedule?

Also, since bridging the attribute gap, I have also resolved a number of outstanding attribute issues. I mentioned previously that my home has no 'zones', that due to a lack of access I will not be modelling 'connections', and that I do not hold any 'spares' in my home. Also, as far as I am aware, no items that I maintain have any product required 'jobs' to maintain their operation or warranty, meaning that I also do not require any 'resources' to complete these non-existent jobs. Therefore, only the following outstanding attributes remain unresolved:

Facility:	*Currency Unit (Not supported in Revit)*
Facility:	*AreaUnitMeasure (I have no formal convention so I have not looked into it)*
Facility:	*Description (No IfcBuilding equivalent in Revit to attach a description to)*
****RESOLVED:***	*BuildingLongName is needed as a shared parameter**
Type/Component:	*Description (I can make it work for one or the other, never both)*
Attribute:	*Unit (Not Supported in Revit)*
Attribute:	*Allowed Values (Not Supported in Revit)*

To fix these items until they are supported, I have started to create a schedule of post-export changes to be applied to my COBie sheets.

The spirit of the BIM process is to provide the right information, to the right people, at the right time. If I have to do a little 'post' to achieve it, so what? The important part is that the process is managed. Because I have clearly outlined by process and kept this information in separate databases I see no problem with this approach.

There we have it, aside from the properties I have identified, I have demonstrated here and through previous posts that I am able to populate my information model and export out the data I need into COBie. Now that I have proven the process works, lets put it into practice...

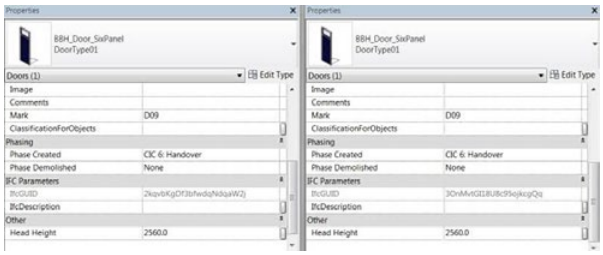
What is an asset identifier?
The recent work I was having done to my gutters got me thinking about asset identifiers and their use. When I defined my data requirements, I noted that I need to have a unique identifier for each of my assets so that each one has a unique reference to be registered, one of my model purposes.

According to the BRE BIM Terminology Tool, a unique identifier is:
Role of a character string when used for unambiguous reference to a concept or to an individual thing (e.g. a physical object or an aspect or a fact or a relation type) and that is unique within a particular common context, preferably in a universal context

By applying a unique identifier to my components, I will have their asset identifiers. To save on effort, I initially thought it would be a great idea to use each component's Globally Unique Identifier (GUID) as the asset identifiers. To do so, I had set my HandoverMapping file to populate the asset identifier field with their respective GUIDs.

ExtIdentifier	AssetIdentifier
2yzjsBnNjFphJFekxxTOhp	2yzjsBnNjFphJFekxxTOhp
08NEZYXKD4AvjMLAQtn3KB	08NEZYXKD4AvjMLAQtn3KB
08NEZYXKD4AvjMLAQtn3K0	08NEZYXKD4AvjMLAQtn3K0
3PLKOOkofE$ftgeWu8lHSq	3PLKOOkofE$ftgeWu8lHSq
3PLKOOkofE$ftgeWu8lHSH	3PLKOOkofE$ftgeWu8lHSH
0QkfLjhDX3L8WjYyIpRCcK	0QkfLjhDX3L8WjYyIpRCcK
0lRgZrOa14mBQg0lUA4jMl	0lRgZrOa14mBQg0lUA4jMl
096i7GP3r2IwKwLgxL8N84	096i7GP3r2IwKwLgxL8N84
1cbwcnLSX9KOqW0ADVQ8SV	1cbwcnLSX9KOqW0ADVQ8SV

While it might seem logical at first, as it does provide a unique identifier for each asset, I cannot control the GUID generated. For example, shown below is the same door created in two difference instances of my house model. Each was placed in the same location, when created each door and was given the same mark, but different GUIDs:



As I cannot change an object's GUID, it means that if I wanted to recreate my house model it would be impossible to match the same GUIDs, making them pointless as asset identifiers. So I will instead be using numbers I can generate on Random.org's string generator.

What triggers an asset identifier change?
Now having an asset identifier is one thing, managing it is quite another. If the builders had actually done what I expected, I would have new gutters; should these new gutters get a new asset identifier? The majority voted for a new identifier but it depends on the situation, as it is not manageable to do this every time an asset is modified. Therefore, I need to define what operational actions are considered to be 'trigger-related events'.

According to the BRE BIM Terminology Tool, **a trigger related-event is:**
Response to a trigger and the reflection of the altered state of the asset in the AIM

Information around triggers and trigger-related events can be found within PAS1192-3. In particular, Annex A.5 provides a schedule of triggers which includes asset replacement. So I have decided to instigate what I am calling the 'sticker rule'.

Imagine that every component in my home has an asset tag sticker. Any trigger that involves replacing a component will need a new sticker, because the current one is stuck to the old component; a new sticker means a new asset identifier.

So to capture this I have modified my employer's information requirements to include the following clause:

When managing the information model during operation, asset information shall be updated following the schedules trigger-related events below:

- *Receipt of information following minor works;*
- *Receipt of information following major works;*
- *Performance evaluation of an asset;*
- *Condition evaluation of an asset;*
- *Maintenance work on an asset, whether planned or reactive;*
- *Asset replacement; and*
- *Change in maintainer of an asset.*

Where a trigger-related event has resulted in the replacement of any assets, those assets shall be given new Asset Identifiers.

By thinking about how I am going to use my asset information I have started to establish a simple and pragmatic trigger event strategy to control how and when I update my asset information model. All good information to help complete PLQ2.5!

Now that I have a system in-place, I need to do some data entry into my model... ■

To be continued in the next issue.

@DRossiter87

Seven things to see at Digital Construction Week

The UK's leading event for the digital construction community returns to ExCeL London from 17-18 May 2023. Here is what to expect at this year's show.

Digital Construction Week (DCW) offers insight and inspiration to help built environment professionals design, build and operate better.

The show returns to ExCeL London on 17-18 May 2023, welcoming 5,500+ forward-thinking attendees eager to harness technology, streamline projects, and drive much-needed change.

Visitors will meet over 150 big-name brands and cutting-edge start-ups showcasing the latest tech, tools and solutions for the built environment. Plus, they will hear from the industry's brightest minds and get up to speed with key trends in the free-to-attend education programme featuring 300+ expert speakers.

If that is not enough to strike up your interest, here are seven reasons to visit DCW this year...

1. Hear the client perspective at the new Asset Management Stage

The 2023 show sees the introduction of the new Asset Management Stage, sponsored by Glider. The theatre will feature sessions focused on asset handover, management, maintenance and operation.

Speakers from government, local authorities, major projects and the private sector will share the client-side perspective. Find out what owner/occupiers really need from their assets and where you fit in.

Inspiring talks will help you join the dots between the construction and operational phases of projects. Learn about the digitised information and strategies available and how this can improve the way your assets are managed through their lifecycle.

2. Learn about decarbonising the built environment with ZERO

The ZERO team are back for 2023, partnering with Natural Building Systems to create a brand new ZERO Lounge at DCW.

Here you can meet the team, discuss your decarbonisation objectives and grab a beer. They will also present their ZERO Roadmap outlining their plan to decarbonise the built environment.

The Net Zero Stage, in partnership with ZERO and sponsored by Autodesk, will also return. Sessions showcase pioneering projects and share solutions to help the industry on its sustainability journey.

Ollie Hughes, the co-founder of Digital Construction Week, says: *"We are excited to bring back the Net Zero Stage for a second year. We are once again partnering with independent industry group ZERO to produce a packed programme. Visitors can learn how digital tools, methods and skills can improve project performance and lower emissions, and how DfMA at renewably powered facilities can move us towards net zero emissions."*

James Bowles from ZERO adds: *"Construction of our built environment accounts for an estimated 12% of all CO2e emissions – we need to change this. ZERO wants*

to support the drive to low carbon construction and we're excited to continue our partnership with DCW. The Net Zero Stage will include presentations from leading organisations, exemplar projects, and exciting new technologies."

3. See exclusive UK launches of the latest products

DCW is the place to see exclusive launches of the latest products. This year, be among the first to demo HP's new SitePrint, an end-to-end suite of technologies designed to automate the site layout process.

Designed for autonomous operation, the SitePrint can improve the productivity of the site layout process. It features text printing capabilities that bring additional data from the digital model to the construction site.

HP will run live demonstrations of the SitePrint on the show floor. Look out for a registration link available soon to save your spot. Signing up is not mandatory, but priority will be given to those who do.

4. Get to grips with information management

If you are confused about the shift from building information modelling (BIM) to information management, look no further than the Information Management Stage at DCW (in partnership with nima and sponsored by the UK BIM Framework).

This stage is stacked with sessions on digitised information, data standards, the increase in digital maturity and what information management can do to support the built environment. With compelling real-world examples, attendees will learn how to effectively manage information.

And that is not all. The Information Management Exchange will also return. The Exchange is a space to collaborate and share ideas, with a more informal format that includes 'ask the experts', 'in conversation with...' and 'open mic' style sessions.

5. Glimpse the future in the Start Up Village

DCW are working with the C-Tech Club to introduce you to a host of early-stage start-ups looking to shape the future of the built environment at the new Start Up Village.

Here, you will learn how the latest concepts have the potential to solve some of the industry's biggest challenges. Expect to see prototype technology and new 'must-haves' that set the bar high for digital construction. Meet the brains behind the technology and put your questions to them face-to-face.

The village will feature demo booths, a networking and presentation space. Plus, private and bookable meeting pods. Be sure to pay a visit to meet emerging brands with big ideas.

Ollie Hughes says, *"The Start Up Village is a really dynamic area of the show floor, and I would urge all visitors to stop by. It is a great place to meet disruptive new brands and see where the digital construction industry is potentially heading next."*

The Start Up Village is a really dynamic area of the show floor, and I would urge all visitors to stop by.

6. Meet face-to-face with 150+ brands

The heart of DCW is the bustling show floor featuring 150+ brands, including Autodesk, Bluebeam, Causeway Technologies, Cintoo, Glider, HP, Kier Construction, Mission Room, MSite, Paperless Construction, PERI, Procore, Sir Robert McAlpine, Strata, thinkproject, TimelapseLAB, Willow, Xinaps, YardLink and many more.

At the stands visitors will see first-hand the products and solutions driving change in the built environment. Experience hands-on demos, highly anticipated reveals and get one-to-one guidance from the teams behind the tech.

Whether you are interested in digital twins, augmented reality, information management, automation, AI, DfMA or robotics, there is something for every industry professional at DCW.

7. Grab a drink with other industry innovators

With the industry together under one roof, DCW is a prime opportunity to catch up with old colleagues and meet new faces. Where better to do this than during DCW Drinks on Wednesday 17 May?

As the first day of the show comes to a close, join us for an hour of networking with visitors, speakers, and exhibitors alike. Check out interactive exhibits while winding down with a drink in hand.

Ollie Hughes concludes: "Technology is changing the built environment fast. DCW is the place to become future ready and get to grips with the changes to stay ahead of the competition. Join like-minded professionals at the show and grow your knowledge on everything you could need to build, operate, and design better. Do not miss out on registering for your free trade ticket. We look forward to welcoming you in May!"

Register for your free ticket

Digital Construction Week returns to ExCeL London from 17-18 May 2023. For more information and to register for a free trade ticket visit digitalconstructionweek.com. ■

Continuous Professional Development

Be not afraid of greatness. Some are born great, some achieve greatness and others have greatness thrust upon them.

William Shakespeare

The next Continuous Professional Development (CPD) monitoring period is almost upon us. The best place to start is by, planning and setting goals to create a personal development action plan. Not everyone takes the same approach to their professional development, therefore tailor this to suit your own expectations and ambitions. The benefits of CPD enables you to remain relevant and able to carry out meaningful roles in the future whatever your age, or how long you have practised for.

Members and affiliates (excluding student members) are obligated to complete 35 hours of mandatory CPD but as famously quoted by Shakespeare "what's done, can't be undone."

Once the mandatory 35 hours have been completed, you can congratulate yourself to know you have continued to strive for greatness by pushing yourself to further develop your skills which may lead to a change in what your day-to-day may look like at work. By undertaking regular CPD it can improve productivity and delivery which may also result in higher performance within your current job role and enable you to progress to the next level of your career. You may even notice these changes in your colleagues or employees who undertake CPD.

Worried about the cost? Fear not, paid for courses/seminars are just a few of the ways in which you can develop yourself professionally. In most cases, you can direct your own learning and development to suit your ambitions. Best of all, the majority of these activities do not require much, if any financial investment on your part. Activities that can count towards your annual CPD requirements include:

- Reading of books and periodicals
- *AT Journal* and *AT Weekly*
- Speaking to colleagues and/or mentors
- Attending Regional, Centre or aspirATion events
- Being a mentor for someone else
- CPD Catalogue
- Webinars or podcasts
- Writing articles/technical papers in *AT Journal* or other relevant publications
- AT CPD Register
- Information from other organisations and professional bodies also counts!

More details as to what contributes to your CPD can be found at https://architecturaltechnology.com/education/cpd/continuing-professional-development.html.

[1]All members and affiliates (excluding student members) are required to undertake a minimum of 35 hours CPD every year as stated in the Code of Conduct, the clauses are extracted for ease here: Clause A7: Continuing Professional Development The members (excluding student members) shall: A7a) keep themselves informed of current practices and developments appropriate to the type and level of their responsibilities; and A7b) be able to provide evidence that they have complied with the requirements for continuing Professional development (CPD) as published by the Institute from time to time.

Clause B7: Continuing Professional Development Affiliates shall: B7a) keep themselves informed of current practices and developments appropriate to the type and level of their responsibilities; and B7b) be able to provide evidence that they have complied with the requirements for continuing professional development (CPD) as published by the Institute from time to time.

Use your CPD to become qualified

Has progressing your membership to become a Chartered Architectural Technologist been on your mind? Starting your Professional Assessment would also count towards your CPD.

Already a Chartered Architectural Technologist? Now is the time to push yourself to the next level. You know the process of becoming a Chartered Architectural Technologist does not happen overnight, but you have succeeded. Now is the time to think bigger and become a Fellow, FCIAT. Fellow status is another mark of an individual's commitment to upholding professional standards. The Membership Department offers FCIAT workshops how to progression sessions which also count as CPD.

For more information on how to become a Chartered Architectural Technologist or Fellow, visit the website or contact membership@ciat.global

If you are interested in, or already work in areas such as environmentalism or conservation, why not consider undertaking CPD through a specialist route? Preserving the environment is essential and the need to live sustainably is more prominent that ever. CIAT has many CPD sessions which dive into the importance of the environment and sustainability. Our Specialist Registers have recently been reviewed meaning that you can apply to become a Chartered Environmentalist or Accredited-Conservationist.

For more information on how to become a Chartered Environmentalist, visit: https://architecturaltechnology.com/joining/specialistregisters/chartered-environmentalist.html

For more information on how to become an Accredited Conservationist, visit: https://architecturaltechnology.com/joining/specialistregisters/conservation-register-new.html

For further information as to what constitutes as CPD, please contact the Education Department on education@ciat.global ■

UK's largest built environment event makes welcome return to London

A host of new features, famous faces, interactive demos and ground-breaking products await visitors to the UK's largest event for the built environment, UK Construction Week (UKCW), when it makes a welcome return to London's ExCeL from 2-4 May 2023. Registration is now live.

TV architect and education campaigner George Clarke, BBC News Business Editor Simon Jack and BBC presenter Victoria Derbyshire are set to chair the Main Stage at UK Construction Week and will join the 25,000+ visitors who will head to UKCW London, which debuted in the capital in 2022. UKCW London is co-located with Concrete Expo and The Offsite Show as well as the UK's premier event for the self-build sector, Grand Designs Live.

With over 10,000 products on display from over 300 exciting exhibitors including Sika, Rointe Kingspan, Google, Sevadis, HP, Celsa UK, Houzz Pro, Hanson Plywood and many more, the multi award-winning show attracts a wealth of overseas exhibitors from as far afield as Australia, China, India, Norway, Turkey and the UAE.

Highlights of UKCW London 2023 include:

- The ZERO feature, which will include a full-scale build by Natural Building Systems, demonstrating how combining low embodied-carbon materials with modern construction methods can transform the industry. The ZERO Playbook workshops will enable contributors to share & learn how as an industry we can get to net zero as fast as possible.
- The Building Engineering Hub will host CPDs from The **BESA**, the UK's leading trade organisation representing the interests of firms in all aspects of engineering systems and services in buildings. The themed daily topics are Day 1: Indoor Air Quality and Vent Hygiene; Day 2: Building and Fire Safety and Competence and Compliance; and the final day is on Installing & Regulations around heat pumps, boilers and f-gas.
- The Culture Change Hub will focus on improving inclusivity within the built environment, wellbeing and mental health, and professional development. Daily programmes will be delivered by The National Federation of Builders, Building People and The Women in Construction Awards
- A busy programme of high-profile thought leadership speakers which includes: Mark Thurston, CEO, HS2; Sadie Morgan, co-founding director of dRMM Architects, youngest and only third ever-female President of the Architectural Association, Design Chair for High Speed Two (HS2) and founder of the Quality of Life Foundation; David Hancock, Project Director, Infrastructure Projects Authority; Bola Abisogun OBE, RICS, digital disruptor and innovator, Founder & Chairman of DiverseCity Surveyors (DCS), Digital Director at BIM Academy and Digital Twins Skills Academy
- An expanded networking zone, allowing visitors more space and time to catch up with colleagues and contacts, with over 20 different networking events planned by partner organisations.
- A new tunnel entrance and easier to navigate floor plan which will allow delegates to pinpoint their areas of interest and plan their time efficiently.

Celebrating **Culture Change in Construction**, UKCW London will host three days of debate and discussion from top speakers on how the industry can move forward to tackle its biggest issues, including quality, fire safety, sustainability, offsite manufacturing, mental health, and improving diversity and inclusion. Visitors will also be able to find sections dedicated to Digital Construction, Infrastructure, Offsite, Surfaces, Net Zero including Renewables, HVAC, Energy Management; Build Show including Roofing, Cladding and Insulation; Tools; Health & Safety; Fire Prevention; Future Lab; and a Careers Trail.

Officially opened by George Clarke, UKCW London will also feature sessions and seminars led by industry experts across the show's six stages; the show will feature an incredible300 speakers, with over 150 hours of CPD seminars available.

Nathan Garnett, UKCW event director, commented: *"UK Construction Week London got off to the best start we could ever have imagined, and this year's second edition will be bigger and better. The amount of innovation we see each event is proof this is an industry changing fast, and this May UKCW at London ExCeL will be the best interactive showcase for a sector that should be optimistic about the future as we continue to embrace culture change."*

Key show features include:

- **Seminar programme** over **seven dedicated theatres** and workshops; details of the comprehensive seminar programme and CPD opportunities will be revealed in March.
- **The Future Lab** - a dedicated showcase of innovative products of new solutions for the built environment
- **The MTC's interactive sandpit feature** – an exclusive showcase of innovative products of new solutions for the built environment
- **3 full scale builds** illustrating the benefits of MMC & offsite construction
- **UKCW Careers Trail** - giving free face-face professional development advice, and meet and network with top employers
- **2 Co-located conferences** delivered by event partners

Register for UKCW London for free - ukcw-london-2023.reg.buzz/cab-campaign-pr ■

UK Construction Week LONDON

In partnership with CIAT

2-4 MAY 2023 | EXCEL

LONDON'S LARGEST CONSTRUCTION EVENT

150 hours of CPD | 300 exhibitors | 400 Speakers | 10,000 products

ukconstructionweek.com

REGISTER FREE

Build	Digitalisation	Infrastructure	Net Zero	Careers	Concrete Expo 2-3 May 2023	The Offsite Show 2-4 May 2023	Grand Designs Live 2-4 May 2023

Sponsors: ABC+ Warranty, aico, CEMEX

Official media partner: CONSTRUCTION BUZZ

INTERNATIONAL
PROPERTY
AWARDS

2023-2024

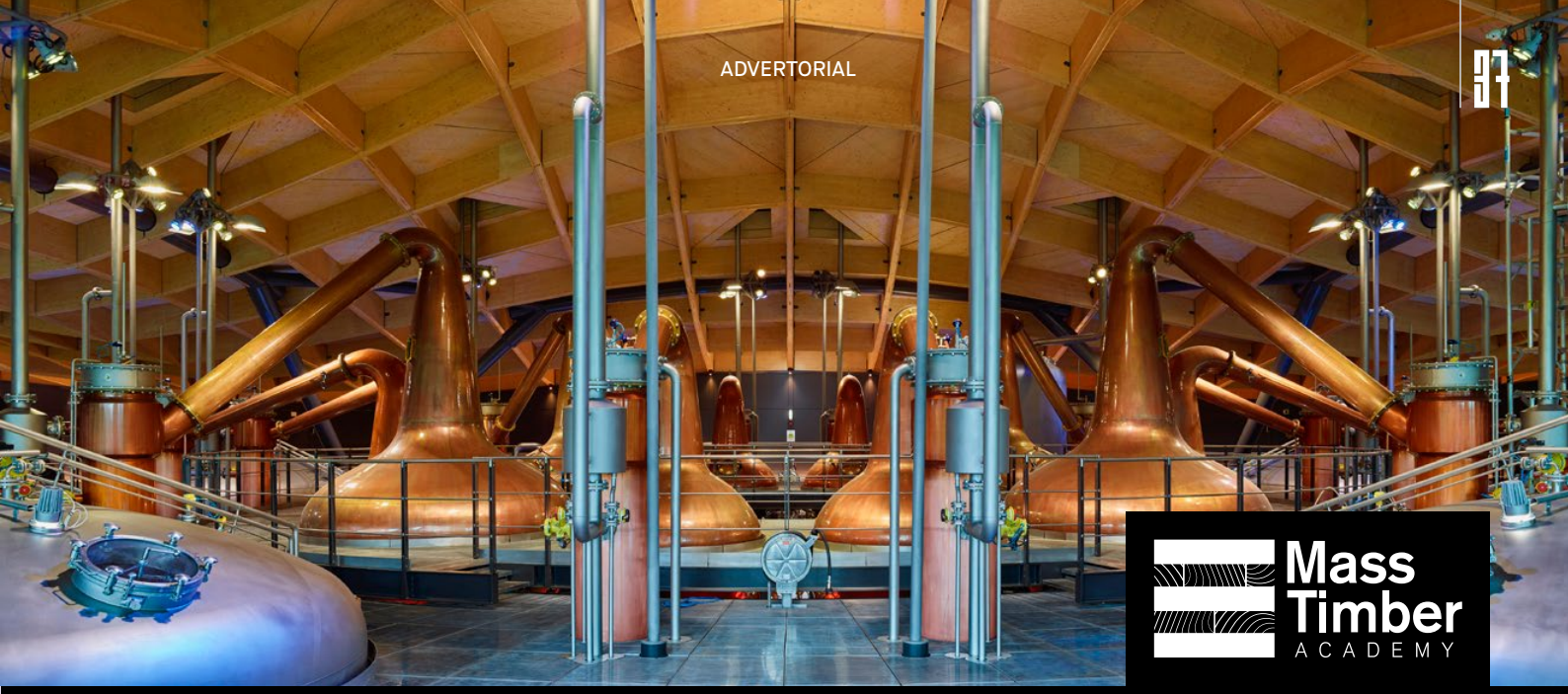
What have you got to show for being the best?

Take part in the world's most prestigious property awards programme, covering both commercial and residential specialities. Categories cover all aspects of construction, development, architecture, real estate, design and interiors.

We're working with CIAT to encourage their associates to enter the awards to showcase their projects and work. **Enter now for 2023.**

Enter here: www.propertyawards.net/ciat
For more information: +44 (0)7763 985824

CIAT



Scotland East and Scotland West innovate with ‘The Mass Timber Revolution’

Scotland East and Scotland West have come together to provide members and affiliates with a new CPD online course on the many possibilities of mass timber.

The two Regional Committees have collaborated with the Mass Timber Academy, the UK’s only independent professional education provider on this specialist subject to develop a bespoke, six-part course that embraces all of the solid laminate timber systems in use today.

Jon Stinson, Chair of Scotland East Regional Committee said, “we are very aware of the increasing use of cross laminated timber and other modern timber technologies but also conscious that most of our members and affiliates have never received any formal training in how to design, detail, specify and build with these.”

“Until now, there have been fewer buildings in Scotland that have made use of products like CLT and LVL, a situation that is partly due to the additional cost of transporting these materials northwards following their importation into the south of England where the main market for them has been until now.”

“This will inevitably change - we can see how the climate emergency is affecting the way we think about the construction methods and materials we need to use to deliver buildings that will perform better over their lifetimes. For many of our members and affiliates, questions of fire and moisture control inevitably come to the fore when the use of modern timber technologies - whether on their own or in hybrid solutions - is being considered, but it is clear there are widespread misunderstandings about these issues and other technical aspects of these products and systems, whilst their many benefits are less well known.”

“In part this is down to the lack of opportunity to date to use them”, said Stinson, “but there is also an unspoken fear of the unknown, an entirely rational concern given the lack of independent, objective education available on the subject, which is why we have gone to the Mass Timber Academy to bring its specialist experience to members and affiliates.”

“Our two Regions have chosen to make this knowledge deficit a central plank in the CPD provision we are able to support for members and affiliates in Scotland in this first half of 2023. We have worked with the Mass Timber Academy to tailor a course that will address technical, insurance and regulatory concerns for example, whilst also highlighting the advantages and opportunities these products and systems offer.”

The six-part, lunchtime course begins on Wednesday 19 April with five further one-hour sessions taking place fortnightly before concluding on Wednesday 28 June 2023. This means members and affiliates will receive a total of six hours of structured education that can count towards their personal CPD obligations.

“Yes, there is a cost to take part in this online course, but we believe members and affiliates will recognise this as an investment in their careers and in the client services their practices and companies can offer. Scotland East and Scotland West are very aware how challenging these times are and have secured significant discounts on the course fee for members and affiliates in Scotland. We aim to build on this kind of pro-active support in the future.”

More information on this and how to book a place can be found at masstimberacademy.com/booking

Greater London Regional Student Awards

Words by Niall Healy MCIAT, Regional Education Officer

What better way to spend a dark January evening but in good company to celebrate the hard work of the talented Architectural Technology students from the five London universities delivering CIAT Accredited degree programmes.

On Thursday 26 January the Design Centre of EH Smith in Clerkenwell, London hosted the Greater London Regional Student Awards for Class of 22. The assembled audience had the privilege of witnessing the future of the profession and Institute being presented with a prestigious accolade to their hard work, talent and academic achievement by the guest of honour, Kevin Crawford PCIAT.

It was also a privilege to have the opportunity to receive a presentation from Maria Gasparian, an architect and architectural ceramic artist, who has developed a beautiful body of work that elevates the humble brick to a work of art. Maria also very kingly created a special piece of work which was presented to each 3rd year Highly Commended and 3rd year Winning student from each of the five universities.

The awards event has evolved from a virtual event to what is now an important moment in the Greater London Region's social calendar. The Region is very fortunate to have London South Bank University, University of Westminster, Middlesex University, University of West London and University of East London delivering the Accredited Honours degree programmes. The hard work of the academic staff at the coal face of education delivery was clearly evident through the work of the students in their charge.

The spirit of this event is celebration with 20 of the 50 nominated students receiving specific recognition for their achievements. EH Smith was kind enough to provide

the students the opportunity to exhibit examples of their work on the night. The Regional Committee is indebted to the team at EH Smith for their generosity and hospitality.

Now on to planning the awards event for 'Class of 23'!

Stay tuned to the Greater London Region's social media channels for announcements of up-and-coming events. GLR is where it is AT!

Follow us on:
Twitter: @CIAT_London
Instagram: @ciat.london
Facebook: CIATGreaterLondonRegion

Students and staff from University of East London with Kevin Crawford PCIAT

Citations given by tutors for 3rd Year Winning Students

Middlesex University London

Citation for Trishan Mepani

Trishan was an exemplar student.

He belonged to the cohort that was hit by the pandemic in his first year and experienced second year entirely online.

His positive attitude towards his learning, his commitment and eagerness to learn and progress makes him a great team player.

The academic staff are delighted to recognise Tristan and his efforts through this prestigious award.

UNIVERSITY OF WESTMINSTER

Citation for Gus Hodge

Gus studied the AT programme at Westminster part time, whilst juggling his full time roll - no mean feat!

He was always a solid character in the studio - reliable, consistent, generous and respected.

His industry knowledge and experience meant a strong foothold in reality, we therefore encouraged Gus to push himself creatively; his final year project is a magnificent culmination of that creativity and technical brilliance.

It has been an absolute pleasure to be a part of Gus' story, and we have no doubt he is bound for great things!

London South Bank University

Citation for Abu Hurayrah

Abu has an excellent work ethic and takes great pride in the presentation of his work.

The academic staff are delighted that his achievement can be recognised by this very special award and are confident that he has laid the foundation for a very successful career ahead.

UNIVERSITY OF WEST LONDON The Career University

Citation for Mariam Amiranashvili

Mariam showed incredible progress throughout her degree always improving her design and detailing skills.

She excelled in her final year project producing a sensitive and well thought design for a mixed-use public building.

This was supported by a well-researched technical report and construction details.

Her attention to detail and will to learn are great attributes that will be appreciated by good employers

We would like to wish Mariam all the best in her career as an Architectural Technologist.

University of East London

Citation for Danny Tran

Danny has been hard working student throughout his 3 years at UEL, consistently achieving high grades.

His work has been outstanding in every area of study.

The resilience and tenacity he displayed to complete an excellently considered architectural scheme with an elegant technical resolution to his final project deserves special mention.

2022 AGM

The AGM took place in Bristol on 26 November 2022 as a hybrid event with delegates in person and attending via Zoom. However, it was the turn of transport strikes which restricted some delegates from attending.

The Institute's 17th Annual General Meeting, held at Bristol Marriott Royal Hotel included the approval of the accounts as well as the authorisation to Council to appoint the auditors. There was one Resolution debated and voted on by the Voting Delegates, made up of representatives from the Regions and Centres. The following was approved with one vote against:

Resolution 1
To amend Section A, 1c in the Conduct and Disciplinary Procedures to read 'To expel the member from any future association with the Institute.' to mirror Section B 2c) and Section C 3c).

In his closing President's address, Kevin Crawford spoke of the highlights of his term and a round-up of the Institute activities in 2021-22, including work around climate change and the Building Safety Act 2022, of which sessions on both topics were held in an afternoon conference with keynote speakers and case studies from Chartered Architectural Technologists.

At the close of the AGM, Eddie Weir PPCIAT MCIAT began his second term as President Elect - an Institute first - and Dan Rossiter FCIAT began his term as Vice-President Technical. Eddie serves a year as President Elect before taking over as President at the AGM next year. Dan will be working with and supporting the Practice and Technical Department.

A presentation of thanks was made to outgoing Chief Executive, Francesca Berriman MBE HonFCIAT with cards from those present and the gift of a radiogram and a train journey of her choice. A standing ovation was given from all those present. ■

Friday night is charity night!

The Wessex Regional Committee report on their Friday night social event ahead of the AGM.

26 November 2022 and CIAT representatives gather and meet at the Bristol Marriott Royal for the Annual General Meeting. As they are taking their seats, a glance across the room reveals a few sore heads as the sound of a buzzing night-before rings in the ears of the many in attendance. The evening before, the Wessex Regional Committee had held a charity event, raising money for Wallace & Gromit's Grand Appeal. If you have not heard of them before, the Grand Appeal is the Bristol Children's Hospital Charity, providing lifesaving medical equipment, family accommodation and specialist facilities to support critically sick children and their families. Families travel from across the Wessex Region and further afield for treatment at the Bristol Children's Hospital. The evening was kindly sponsored by Autodesk.

Earlier that day, fifty students from the University of the West of England, the Wessex Region's only Accredited degree programme, attended a live event at the Engine Shed in Bristol. The event was titled 'Where it's AT: Careers in Architectural Technology" and was aimed primarily at students as a way to provide inspiration and insight for a future career in the discipline of Architectural Technology. Presentations were given by James Banks, Membership Director, Jessica Steele, from the Architects' Benevolent Society, Joe Hyett ACIAT, Anthony Walsh FCIAT and Carl Mills FCIAT, Vice-President Education. Insights were given into the practice of Architectural Technology students, the process of achieving Chartered Membership and advice on becoming involved in the Region's active aspriATion Group. Jessica, along with other guests from the ABS,

sitting at. And the starters, a buffet-style blend of toasted sourdough, dips and hot pizzas were spread out, much to the delight of the many queuing for their first dish. The main course included mini-burgers topped with tomato and cheese, sausages, salads and chips topped with guacamole, soft cheese and chopped tomatoes and red onions. During the evening, raffle tickets were being sold by the book load, with the proceeds going to the Grand Appeal. Raffle prizes included a chutney food hamper, a one-hundred pound Young's & Co Restaurant voucher and two tickets to the Goodwood Festival of Speed.

The Bristol Children's Hospital have recently been working on a project to transform the Caterpillar Playroom. The scheme will create a more relaxing environment with soft play floor space, activity tables and chairs offering space for painting, drawing and crafts. The new Caterpillar Playroom is estimated to cost £50,649. In their efforts to organise the event, the Wessex Regional Committee raised £2,310 through the sale of tickets, £2,000 match-funded by Barratt Homes and a further £1,026 collected on the evening. A total of £5,336 was raised for Wallace & Gromit's Grand Appeal, and with £8,614 left to raise, the money raised through the Friday night social event will almost complete the fundraising for the project. ■

Aled Rees FCIAT and its new President, Eddie Weir PPCIAT MCIAT, raised awareness about the work of the charity and the support offered to those practicing or studying Architectural Technology.

Later that evening, and the first guests start to arrive. Prosecco is being served at the bar, and a steady stream of familiar faces emerge through the doors of the venue from the cobbled streets of Bristol's waterfront Floating Harbour. A brief glance up at the ceiling and you cannot help but gaze at the array of composite tie-rod roof trusses spanning the full depth of the dining hall. The venue, Harbour House, is a 19th Century transit shed, once owned and designed by Brunel as his private boathouse. In the bar area, an Autodesk-and CIAT-branded screen serves as the backdrop to the 'photobooth' feature, and in the dining hall, seating for 90 guests laid out in tables of 8 to 10 guests. What a fitting venue for hosting those from the Architectural Technology community.

As guests were invited into the dining hall, there was a lively buzz of members and affiliates gradually working out which tables they would feel most comfortable

Honorary Officer elections 2023 nominees standing for election

Following the call for nominations in the last issue of *AT Journal*, each candidate now takes the opportunity to present their manifesto.

Honorary Secretary

Nominated candidate: Gordon J Souter MCIAT

I am delighted and honoured to have been nominated again for the position of Honorary Secretary and if elected, I will continue to serve the Institute with immense pride, passion and dedication.

I have been working in the construction sector for over 35 years. I have worked mainly in the house building sector holding several positions from Architectural Technician to Technical Director. My experience within the house building industry has provided me with the skills I believe are required to be Honorary Secretary of our vibrant and continually evolving institute.

I have been a Member of CIAT since 1993 and have held numerous offices at national and Regional level and also represented the Institute on a number of external bodies. During this time, I have gained a sound knowledge of the workings of the Institute and it is this acquired knowledge which I would utilise to maintain the reputation and stature of CIAT.

This last year has seen changes to the structure of the Institute that will take us forward with a new dynamic and direction. Whilst these changes will invigorate CIAT we must ensure our core values are not forgotten. I can assure you all that I will work efficiently and effectively with our new CEO for her vision for the future.

I am passionate about the Institute and I believe I have exhibited this through the service I have undertaken to date. I would very much like to continue this service by being re-elected to the post of Honorary Secretary. With the appointment of the new CEO, it is particularly important to have an element of continuity which I will be able to provide.

The position of Honorary Secretary is to provide support to the CEO to ensure the governance of the Institute is effective. As Honorary Secretary, I would maintain this by dealing with potential issues swiftly and efficiently as well as providing support to my fellow Officers and the staff at City Road. I am not afraid to make the tough decisions when/if required.

It is my belief that the position of Honorary Secretary requires a steady and level-headed approach, with good analytical and mediation skills to ensure the smooth operation of the Institute and the correct application of its policies and procedures. I possess the necessary attributes to ensure this process is maintained.

CIAT continues to move forward in stature and recognition both nationally and internationally and I would endeavour to ensure any new policies and procedures put in place enhance this status, now and into the future. I would also strive to ensure the workings of the Institute continue smoothly and deal with potential issues swiftly and efficiently.

An important part of any organisation is to ensure that the Regulations and policies are current, fit for purpose and as future proof as possible. If elected I would continue to work closely with the staff and other officers to ensure currency of the Laws of the Institute. Those of you who attend the AGMs will know that this is especially true of the annual changes to the Code of Conduct.

I will also work closely with the CEO, staff and Honorary Officers to drive forward the Corporate and Strategic Plans for the benefit of the Institute.

I do not have an agenda for radical changes however if I see an opportunity to change systems for the benefit of the Institute then I will work with the appropriate Officers and staff to implement the changes as smoothly as possible.

If elected I would serve with diligence and dedication for the betterment of the discipline of Architectural Technology and in particular the Chartered Institute of Architectural Technologists.

The position of Honorary Secretary requires the review of a lot of documentation which can be undertaken remotely. Therefore, the position does not require an excessive time away from home or work which I can easily balance.

I would consider it an honour and a privilege to be given the opportunity to serve the members of the Chartered Institute of Architectural Technologists for a further two years.

Vice-President Education

Nominated candidate: Dr Ashok Ganapathy Iyer FCIAT

Experienced architectural academician and Fellow with a demonstrated history of working in university and higher education industry. I am currently working as Associate Professor and Programme Leader at School of Engineering, Architecture and Interior Design, Amity University Dubai since November 2022. My academic and research focus include learning and teaching-based pedagogical research in architecture and design education, intercultural communication and architectural documentation, urban and conservation studies; and curriculum development leading to international accreditation. With a strong academic and professional background, I have received a Doctorate in Architecture from the Welsh School of Architecture (WSA), Cardiff University, Wales.

An architect by profession, I pursued my architectural studies at Sir J.J. College of Architecture, Mumbai; India (M. Arch, 2004) and Pillais' College of Architecture, Navi Mumbai; India (B. Arch, 1997); in addition to a Diploma in Indian Aesthetics (2001) from the Department of Philosophy, University of Mumbai. As the founding member and first chairperson (Professor) at School of Design and Architecture (SoDA), Manipal Academy of Higher Education (MAHE) – Dubai, (August 2004- November 2022) I established their interior design and architecture programmes. My earlier academic stints include Sir J.J. College (2002-04) and Rizvi College of Architecture (1999-2002), Mumbai; India. I also played a key role in the implementation of outcome-based-education (OBE) in curricular design, international accreditation and assessment for the programs at SoDA, MAHE - Dubai including CIAT - UK and Council of Architecture (CoA), New Delhi, India. My other research interests include urban studies and historic architectural developments through ongoing collaboration (2013 till-date) with the Sharjah Museums Authority (SMA), Government of Sharjah - UAE focusing on museum typology and its correlation as cultural denominators with reference to the urbanity of this region. I received the Golden Visa for Creatives (Nov. 2022) through recommendation from UAE Ministry of Culture and Youth recognizing my ongoing research in UAE. My other areas of interest include issues of sustainability in the built environment, fine arts, and critical theory.

As a built environment academic at SoDA, MAHE - Dubai Campus (August 2004 – November 2022), we received the accolade of being the first Indian school to be accorded CIAT Accreditation in 2019; further completing the long-term Accreditation and validation process in 2020 during the challenging period of COVID-19 pandemic. SoDA – MAHE Dubai was the first institution in United Arab Emirates (UAE) and Middle East region to receive this accreditation. I successfully completed my membership criteria for MCIAT and FCIAT in 2022.

The significance of Architectural Technology in the built environment is explored in my doctoral studies titled 'Classification of the approaches to learning adopted by students of architecture in their design coursework.' This research undertaken at WSA, Cardiff University (July 2011 - August 2018) identified the pedagogical gap in students' learning approaches pertaining to architectural education. The importance of technological domain in the built environment parallel to three-other domains of art and aesthetics, architectural theory and socio-cultural understanding is reflected in my pedagogical research and administrative experience of architectural education within UAE and India over the past three decades. Additionally, in the western context of United Kingdom, Europe and United States of America; my research at WSA gave me the impetus in further understanding the divergent attitude given to Architectural Technology in schools of architecture and accreditation bodies. This perceived gap in understanding architectural technology in built environment was the precursor in gaining Chartered Membership and pursuing Fellowship with CIAT.

The doctoral hypothesis is amalgamated in my academic and research career through an illustrative account of nine students of architecture, seven of whom have reinforced grounding to Architectural Technology amongst the four established pedagogical domains in architectural education. This illustrative account of the nine students was presented in a keynote titled "Technological Domain – Paradigm Shift in Students' Approaches to Learning in Architectural Design," at the CIAT Conference 2019 –Architectural Technology in India in New Delhi – India (April 2019) supported by All-India Council for Technical Education (AICTE) and CoA, India. The message of the importance of Architectural Technology and CIAT's role was well-received by architectural and built environment professionals of the world's largest democracy; India. I further presented a paper titled "Adaptive Re-use Of Buildings in UAE – Dubai in Perspective," listed as a CPD at the Architecture & Design Talks, BIG 5 Exhibition at Dubai World Trade Centre in November 2019, emphasising on the role of Architectural Technologists and CIAT in the Middle East and North-Africa region.

For the Honorary Officer elections 2023, I thank my fellow Chartered Architectural Technologists for nominating me for the position of Vice-President Education. In this manifesto, the key message is to disseminate my hands-on experience and understanding of the built environment as an academic-researcher and Chartered Architectural Technologist representing the ethos of CIAT. As Vice-President of Education, the key goals that I would like to achieve will include:

- disseminating the importance of Architectural Technology and CIAT in the MENA region and the Indian Sub-continent; in addition to continued synergies in the UK and European context
- fostering global partnerships, international and industry-based collaborations between CIAT and major institutions in UAE and India; in addition to the UK and European context
- synergising research-based collaborations between CIAT and major higher education institutions in UAE and India; in addition to the UK and European context
- creating a communication corridor for CIAT with institutions offering architectural education in India and UAE to encourage the value of international accreditation of their architecture programmes
- channelising collaborations between CIAT and professional bodies in India including the IIA and Practicing Engineers, Architects & Town Planners Association of India; as well as UAE and the MENA region

With a license to practice architecture in India accorded by the CoA, India and an Associate of the

Indian Institute of Architects, (IIA) Mumbai, India, I am affiliated with the Royal Institute of British Architects (RIBA). As the Vice-President of Education at the CIAT, this honorary position will be the value-quotient of bridging Architectural Technology as the key focus domain amongst the four established domains in architecture and built environment education. My motivation to undertake research on architecture students' approaches to learning is based on the vast potential in this research area and its connection to real-life examples pertinent to professional practice and management of Architectural Technology in the built environment. I have further connected Architectural Technology through the facets of interior design, architecture, and urbanity in the built environment as the focus of my coursework delivery at SoDA - MAHE Dubai and in my current position at Amity University Dubai. In August 2022 as a Chartered Architectural Technologist, I have undertaken hands-on training and skill-builder experience in Autodesk building information modelling (BIM) environment as further grounding to my phenomenographic qualitative research analysing issues in the technological domain of architecture and design education.

My current role as Associate Professor and Programme Leader at Amity University Dubai is a summarisation of the research hypothesis at WSA, a look-back at my post-graduate research in the early 2000's focusing on passive-solar sustainable strategies at Sir J.J. Mumbai, India; further reflecting on the qualitative and quantitative schism required in the mindset of a Chartered Architectural Technologist. My manifesto for the position of Vice-President Education will be towards further contribution to the architectural technological domain by enhancing the value-proposition of this noble profession in the built environment and construction industry by propelling, evaluating and encouraging a new generation of Chartered Architectural Technologists and CIAT Accredited programmes in this region. In my academic career, I have given emphasis to interface between academia and industry focusing on research and development with specific emphasis to professional consultancy through external research projects based on the preamble of CIAT.

The intrinsic value of my role as Chartered Architectural Technologist at CIAT is further reflected in the ongoing research work of architecture and interior documentation, conservation and urban renewal research being carried out at Al Mahatta Museum, Sharjah and Al Mulla Plaza, an architectural landmark of the 1980's in Dubai, UAE. My strategic initiatives include interface with government approval bodies including CoA – India, University Quality Assurance International Board (UQAIB), Knowledge and Human Development Authority (KHDA), Dubai International Academic City (DIAC), Dubai, UAE. As Honorary Officer – Vice-President Education, I will act as an ambassador in presenting the role required to be played by future Chartered Architectural Technologists as-well-as CIAT Accredited programmes amongst institutions in the MENA region and Indian Sub-continent.

The Honorary Officer position of Vice-President Education – CIAT and the encompassed duties as a Trustee of the Executive Board for the Institute will be a continuation in my established career path as a built environment academic and Chartered Architectural Technologist. I will endeavour to continue my hard work and efforts towards the Strategic and Corporate Plans of CIAT in parallel to my goals presented in this manifesto.

https://www.linkedin.com/in/ashok-iyer-a643219
https://orcid.org/0000-0002-1992-8445
https://www.researchgate.net/profile/Ashok_Iyer
https://scholar.google.ae/citations?hl=en&user=mj-B350AAAAJ

Nominated candidate: Paul Laycock MCIAT

I am very pleased and proud to be nominated for the post of Vice-President Education for the elections in this coming September. I started my professional career as a Chartered Builder and came to membership of CIAT in 2004 while I was a partner in my own design and development practice along with my other two partners in the organisation. It has been with this membership that I have found a true professional home that I have become increasingly proud to represent over the years. I have previously been very involved locally, but now focus on involving myself nationally; as a member of the Education Board; as Chair of programme Accreditation Panels; as one of the Moderators of the Membership Assessment Panels; and interviewing candidates on interview panels.

As a previous Vice-President Education, I was part of the team that produced the apprenticeship standard for Architectural Technology; I was involved in the early stages of the Member Grade Review and new Fellowship grade of membership; working with the then new aspirATion Groups in the Regions and Centres to help establish them as the successful part of CIAT's structure they are today; along with representing the Institute at numerous conferences and exhibitions and promoting membership at every possible opportunity in the Regions and Centres.

Through this I have had the very good fortune to work alongside the strong and dedicated staff team we have at Central Office and the equal fortune to meet and work with many of our members from all of our Regions and Centres.

The modern educational landscape

The landscape of education has seen a number of changes in recent and not so recent years. We have seen higher education opened up to a much wider audience than was ever thought possible by previous generations. In parts of the UK, we have seen funding for higher education changing in focus to place much more of the responsibility for funding with the individuals receiving that education and for all of us we have seen a leaner economy placing more demands on graduates entering all industrial sectors. Alongside all of these changes we have seen a growing number of Architectural Technology degrees in the UK and overseas in more recent years.

As a practitioner in higher education, I have seen how these changes in policy have impacted on the sector. The modern student is much savvier individual and much more demanding as a consumer of the educational product. This extends to their choice of industry to enter and choice of career path in that industry that will give them the best prospects on exiting higher education and into their professional career.

This is not really a new concept though. It would be difficult to find anyone who had studied without employment as one of their key aims and motivations for attending university. With a wealth of research and evidence available linking graduate employability to the success of the modern economy.

A reasonable expectation of employment is also not a new idea for potential students and graduates, what is new is the industry they are entering. Rapidly evolving technologies and processes, changes in legislation and increasing demands from clients are all shaping the future of the Architectural Technologist.

A lot of work has been done so far by the Institute, myself and other members in the education sector to increase and maintain quality in a set of strong undergraduate degrees and a small number of masters and other postgraduate programmes.

My first promise – I see this as key underpinning work for the future of the profession, and I will continue to push for and champion maintaining and increasing quality in our undergraduate and postgraduate provision in the UK and around the world.

Industry and education – removing barriers, engaging in conversation and increasing cooperation.

As I have already stated, it would be difficult to find anyone studying at university that did not have employment as one of their key motivators for study. Equally, it would be difficult to find an employer that would not be looking for new employees with the skills at attributes to be successful in the role they are seeking to fill in their organisation.

I see engaging in conversation, breaking down barriers and increasing cooperation as key to both industry and education.

Key to education providers and students in their understanding of industry requirement in both technical knowledge and competency and those skills and attributes needed to work successfully in industry.

Key to employers to both help set the employment landscape, requirements and expectations in education and gain a better appreciation of the education output.

My second promise – to promote closer links between industry and education as a key element in improving our educational output.

Broader and deeper - the future role of the Architectural Technologist and the profile of the Institute

I have had the great fortune to interview for membership some exemplary new members in recent years that has seen our membership grow in numbers and more importantly in depth of experience and knowledge.

The dedication to their area of expertise and passion has stirred considerable emotion in me at times.

Recognising the evolving possibilities for the Architectural Technology graduate is a key element to the future importance of the profession and the Institute.

The Chartered Architectural Technologist is ideally placed to be a key future player in integrating and realising many key agenda in the built environment, developing new techniques, processes, materials and technologies, and working as leading-edge practitioners.

If the profession is to progress and increase its profile, it is essential that this starts with the enlightenment of those considering a career in and already studying Architectural Technology of the potential and possibilities that could unfold.

My third promise – to champion the broader and deeper future of the Architectural Technologist and to promote the Institute as having a membership of leading-edge professionals taking the built environment forward in the 21st Century.

Research and development – the Chartered Architectural Technologist at the leading edge

Following on from the broader and deeper membership profile and from closer cooperation between education and industry, a natural next step for both of these is to look at how this cooperation can be focused into research and development projects seeing the Chartered Architectural Technologist taking a lead in solving real world problems and contributing to the development of materials, components, ideas, concepts, processes and procedures that make up the built environment process.

My fourth promise – to help to build on the good work being done already and promote the involvement of the Chartered Architectural Technologist in this.

Summary and conclusions

So what am I promising? I don't think I am promising anything radical or direction changing. Too much good work has already been done by previous post holders and ordinary members alike to do this.

What I would like to promise you is an experienced academic and practitioner who will be a champion of excellence in education; promoting a strong collegiate of UK and overseas educational establishments; seeking to broaden the possibilities for the Architectural Technology graduate and so increasing the profile of the role and the Institute.

I feel that the profession of Architectural Technology and the professional body that goes along with it has an important role in the future of the built environment, and I feel I can be an active Member who will champion our pathway into that future.

Nominated candidate: Masoud Sajjadian FCIAT

I am a graduate of Nottingham and Liverpool Universities with a background in architectural engineering. I have 11+ years of experience in both industry and academia. As a Fellow Member of CIAT, I am committed to advancing the field of Architectural Technology. I am also the programme leader of a CIAT Accredited MSc at Edinburgh Napier and had the opportunity to take leadership roles within the Architectural Technology community. I am a research active academic and saw the impact of my research works reflected in a report from Intergovernmental Panel on Climate Change (IPCC) and in the UK parliament Research Briefings and Public Health Scotland website.

I will bring a strong commitment to the AT discipline and the Institute, I will bring a research-focused perspective to CIAT to stay ahead of future trends and invest our resources to further advance the AT profession. I possess a robust network of professionals and intend to enhance networking and collaboration with other professional organisations for mutual benefit. My objectives, aligned with CIAT's Strategic and Corporate Plan are:

1. **Educational development:** I will develop the educational capacity of CIAT through AT curriculum development, collaboration with engineering bodies, CPDs and other learning opportunities.
2. **Industry and academia collaboration:** I will expand CIAT's networking events and other opportunities to develop a more meaningful relationship between academia and industry
3. **Internationalisation:** I will help CIAT to make more connections, build more global partnerships and gain more from the educational market globally. For that,

I will develop more inclusive policies, expand the training events for members and celebrate diversity within the organisation.

I will work tirelessly to implement these goals and to promote the value of education as a means to a better future for all. I kindly ask for your vote based on my qualifications, experience, and commitment to the mission and goals of CIAT. Some reasons why you should vote for me are:

1. **My relevant experience:** I have the knowledge and skills necessary to excel in the role and make a meaningful impact on the organisation.
2. **My passion for the mission:** I am deeply committed to the mission and goals of the CIAT and will work tirelessly to promote the value of education and support the organisation's work.
3. **My ability to lead:** I have the leadership skills to effectively guide the organisation and inspire others to get involved.
4. **My willingness to listen and learn:** I am open to feedback and willing to learn from members to make informed decisions and improve the organisation.
5. **My ability to collaborate** to achieve common goals
6. **My track record of success and demonstration of my positive impact**

I hope you can support me as the Vice- President Education.

Vice-President Practice

Nominated candidate: Dan Clements MCIAT

It is a great honour to be once again nominated as Vice-President Practice of the Chartered Institute of Architectural Technologists. As the current incumbent in role, I have been in position since November 2021 and have relished the challenge since I took office.

Over my time as Vice-President Practice, I have been fortunate enough to have communicated with many members and been involved with some of the changes that have happened with the Institute and the industry over the last year or so. It has also given me a great opportunity to better understand the role and the value that it brings to the membership.

My background in the industry goes back to my art college days in Aberdeen in the 1990's, but after experience in several employment sectors, including exhibition work and logistics, I have now been in continued professional architectural practice for 20 years this year. I have a first-class Honours degree in Architectural Technology from Northumbria University, which I undertook on a part time basis from 2006, alongside previous qualifications in spatial design. Having had the benefit of working across a wide section of projects in practice, I had the opportunity to develop professionally, with considerable responsibility from early in my career. I set up my own practice, Aditus Architectural Services Ltd, in 2015 and have seen the business grow from being just myself at home, to three of us in an office in Cumbria with a fantastic and varied client base. We were lucky that we were kept busy during the pandemic and have come out of the other side in a stronger position than when we entered it.

Outside of Architectural Technology, I am an on-call firefighter with Cumbria Fire and Rescue which is a paid role where I turn out from an alerter at all times of the day and night. My experience in architecture has on occasion been invaluable to my firefighting work and both roles provide me with transferable skills. I currently also run a lacrosse club in Cumbria and coach men's, ladies and junior lacrosse in my spare time.

Since joining CIAT and being a Chartered Member for close on twelve years I have undertaken several roles in the Institute, including Regional Chair, Regional Councillor and now Vice-President Practice. As well as this, I have twice been on the board of Trustees of CIAT and have been a Professional Interview Assessor for the Institute for over a decade now. I have always felt that professionally CIAT has given me so much, that it is and has been a pleasure to give back whenever possible.

Why am I seeking re-election to the role? The first year after taking office has been varied and interesting but has also been a learning curve. As well as working on issues relating directly to the role of Vice-President Practice and the Practice Department, I have also been heavily involved with the institute business through my position on the Executive Board. As members may know, we have as a Board been heavily involved in the appointment of a new Chief Executive, a responsibility I and others have not taken lightly. Alongside this, the ongoing legislative changes brought on by the Building Safety Act 2022 and changes in building regulations have, and will, continue to have a massive effect on all practitioners, no matter your core discipline or whether an employee, employer or sole practitioner. I feel that my job is not yet done and will not be by the time of the AGM this year when my original 2-year tenure ends. I also feel that I am growing into the role and am best placed to be in position over the next two years as changes bed in and our membership requires as much support as possible.

As stated in 2021, it is incumbent on the Vice-President Practice to work within the aims of the Institute and within the current and future Corporate and Strategic Plans. Over the last year, I have sought to build on the work of my predecessors and the Practice Department, with only small but positive changes to ensure the continued effectiveness of the role. Looking again sat the five core tenets of the Corporate and Strategic Plans 2018-23 and the incoming new strategic plan, I can offer the following explanation of how I would see my continued role in supporting the aims of the Institute and its members and affiliates.

Leading and promoting the discipline of Architectural Technology and protecting its standards.

I would like to continue to engage with as many members and affiliates as possible to help understand their requirements in practice, both as employers and employees and to also engage with those who employ are members but are not themselves directly connected to the Institute. Perhaps more now than ever it is important that we understand what our membership require from practice services and as a global institute. It is vital that we continue to remove as many barriers as possible to the fair representation of our profession and ensure a level playing field for our members, both those who run practices and those who are employed by them. We cannot allow changes in legislation to marginalise or unfairly inhibit our members right to practice as part of collaborative teams or within our own Code of Conduct. The continued work that the Institute does to evaluate legislation, opportunities and promote our members is

inspiring and I am proud to play a small but hopefully significant part in that work.

Enhancing the profile of the discipline, the membership and the Institute
Perhaps even more so than when I came into office, I believe that our profession produces some of the most enthused, adaptable, and talented individuals within the construction industry. We must continue to get this message across, and I will continue to do so at every opportunity. As the world continues to open-up, I hope to take this message to people a lot more in person over the next two years. A great deal of the industry discussion is still 'virtual' and I have had the pleasure of representing the Institute over a wide genre of topics related to the Practice Department. I will look to continue my work with the other Vice-Presidents to continue to foster a unified approach in how we work for the members interests. With elements of Practice and Technical being so closely linked, we are for instance currently looking at how we best organise the work of the institute to the benefit of our staff and members. It is also vital that we continue to promote the Institute's values and skills and continue to provide our membership with the information and tools required to continue to be industry leaders. Whilst a lot of this work takes place quietly in the background, it is vital to the interests of our members and affiliates, and I will continue to give my time to make sure we provide the best service we can.

Aligning, collaborating and partnering
CIAT continues to have solid domestic and international partnering agreements and memorandums of understanding. I remain strongly in favour of working with other institutes and organisations for the mutual benefit of our members in practice. Given current legislative changes, it is vital that we continue to engage with those representing our collaborative partners and complimentary professions to continue to ensure our members retain their current and future rights to practice in their own regard and retain their high value and status as appropriately qualified and recognised professionals. I will continue to undertake work understanding both how other professions are responding to industry changes and how we can seek to promote a combined approach and maintain fair competition. It is also vital that the work undertaken to promote the rights our non-UK based members to practice unhindered continue and I will continue to promote the interests of all CIAT members and affiliates in this regard.

Providing services for the benefit of members and society
After my nomination in 2021, I pondered how we could deliver the best value for our members in practice. I continue to believe that the greatest benefit the Institute offers to our members is recognition as competent professionals, through membership and the standards that we uphold. I am glad to be involved in some projects that seek to further enhance member benefit and will work over my remaining time in office to see them into fruition. I still believe that we are well placed to deliver on those professional services that the membership requires and hope to identify areas of interest that we can progress. Alongside the Practice Department I will continue to monitor legislation and if required I hope to be at the forefront of delivering the tools that our members will require to continue to practice across all sectors. A strong viable membership is vital to providing benefit to society, not only through the incredible work our members do in the built environment, but also by the professional and progressive nature of our institute and membership.

Remaining an effective and financially viable institute
Membership value maintains membership numbers, which in turn helps to ensure the Institute remains financially viable. I therefore seek to continue my work in supporting member value and identifying how it can be enhanced over time. As a Vice-President of the Institute, I have also had a lot of input through the Executive Board as to how we our run and how we best determine expenditure and investment. It is a perhaps less known role of the Vice-Presidents that we sit on the board of Trustees and seek to make decisions solely for the benefit of the Institute and membership. I am a vocal participant with a strong desire to see us ensure good governance and sound financial sense so that we can continue to deliver on the vital services we provide.

I continue to be surrounded by positive and supportive people in both my professional and personal life and am in a good position to offer a further two years of my time to this role. I am incredibly positive about the future and about the work I have and continue to be involved in. We are rapidly becoming one of the most inclusive and forward-thinking Institutes and profession and I hope that I can continue to do my bit to keep up on the same trajectory. I do believe we can do more to remove some of the institutional stuffiness that comes with a nearly 60-year-old Institute and will continue to encourage our members to input and shape our future. I am incredibly honoured that I was trusted with one term in office and sincerely hope that you might consider electing me to a further two years as Vice-President Practice.

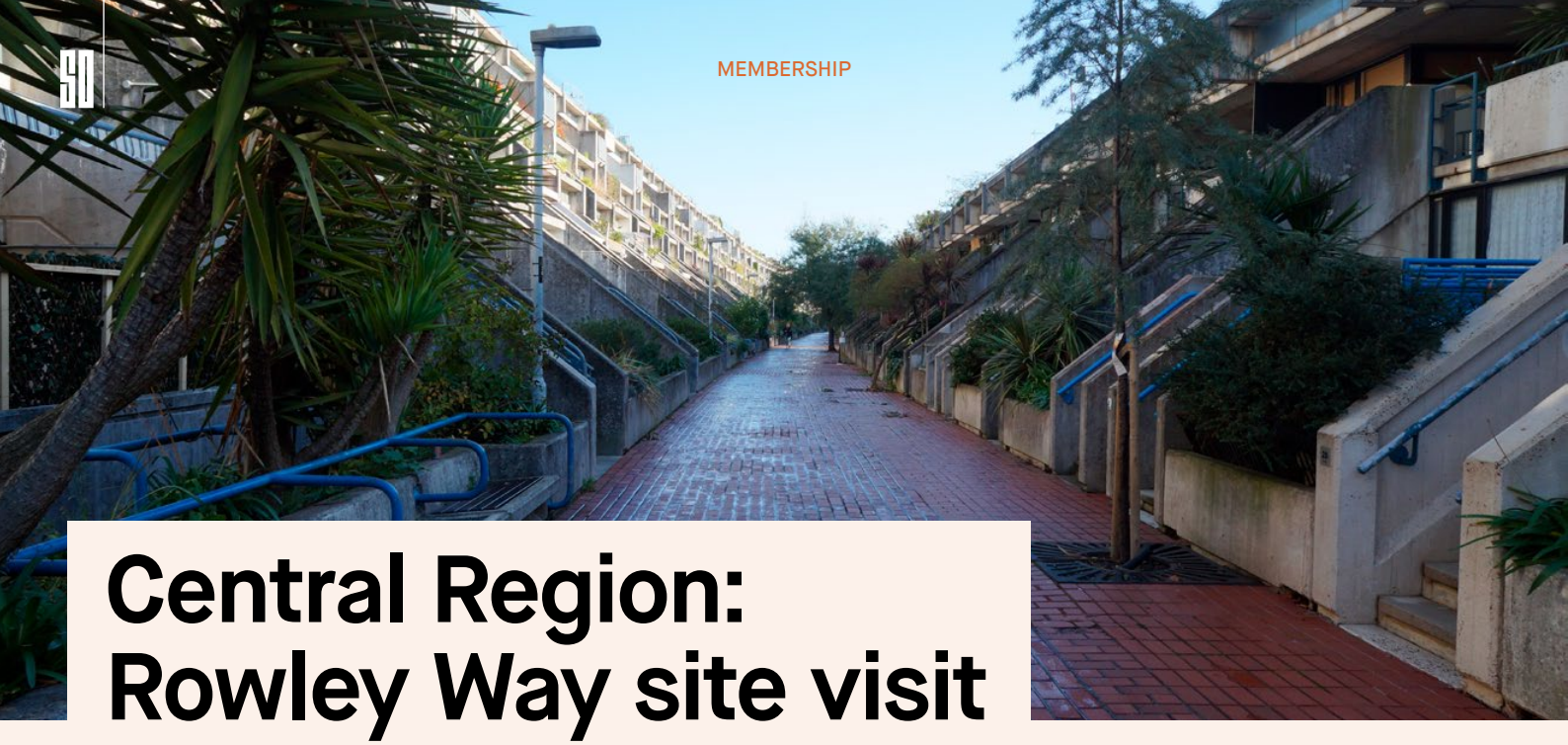
What happens next?

Candidates will be giving presentations at the Council meeting to be held on 11 March and we encourage you to liaise with your local Region, Centre or aspirATion about these.

There will be Hustings held during the run-up period to the elections with all candidates – details on these will be circulated via *AT Weekly* and social media platforms

These manifestos for the nominated candidates will be issued to members and affiliates by email and can be found on our website. A campaign trail is now in progress with the election taking place at Council on 9 September 2023.

Key dates summary
Campaigning by candidates:
27 February – 8 September 2023 inclusive
Election ealerts and updates on the website:
27 February – 8 September 2023 inclusive
Election at Council:
9 September 2023
Candidates advised if not in attendance at Council
Ealert announcing the election results:
11 September 2023
Assumption of position:
November 2023 close of 2023 AGM ■



Central Region: Rowley Way site visit

Words by Tony Keller MCIAT, Regional Chair

Having read about the refurbishment of the Rowley Way Housing Estate in Camden London, I got in touch with Camden Council to arrange a visit. My interest was initially piqued by the proposed refurbishment of this Grade II listed housing estate from the 1970s. Built in concrete and glass, the refurbishment was clearly going to be a challenge and I estimated that it would be highly informative to Architectural Technology professionals - I was right!

For those who are not aware, the Alexandra and Ainsworth Estate, known colloquially by the road, Rowley Way (that is now pedestrianised) predates and passes through the Neave Brown designed 'Brutalist' terraced and tiered housing apartments, which are very visually striking. According to Wikipedia, it features in 17 films/TV series and 20 music videos. From a town planning perspective, it is seminal and contentious because of its general layout, although the layout of the 520 apartments is ingenious, albeit compact.

If we are forgiving of the lack of forethought regarding current requirements for disabled access and those less mobile, the split-level balconied accommodation is light, airy and adaptable due to its sliding partitions. It also manages to keep out the sound of the adjacent railway, neighbours and rowdy pedestrians. The concrete and its geometry are largely responsible for the sound deadening qualities of the design. Whether this was the reason for the extensive use of poured concrete, or it was an aesthetic response to the desire to be 'modern', 'minimalist' or rather born of frugality, I do not know. In true 'Brutalist' style the concrete exhibits, unashamedly, the markings of the site-cast shuttering. For those who attribute this to the aforementioned motives of frugality, it was not. It was a conscious and well-meaning desire to create honest architecture, celebrating modern technology and in so doing, turning an architectural back to vernacular and facing a new bright cosmopolitan future. Sadly, the term 'Brutalism' has been coined because it was never intended to be a reference to the brutality of concrete as most probably think, but rather a reference to the French phrase béton brut meaning raw concrete, although this will not convince some of its aesthetic appeal, I know. However, the uncompromising striking appearance of the concrete is one of the reasons for giving the development a listed status in 1993 and why improving the building's wall insulation is so difficult.

At this point, I would like to thank David Wadsworth, Project Manager at The London Borough of Camden and Paul Martin of Levitt Bernstein, the architectural consultants, for allowing Central Region to visit and talking us through the refurbishment project. They are dealing with so many challenges and I really think it will be worth watching their progress as they deal with so many competing priorities.

We can learn so much from such projects and so can I ask my fellow Members of CIAT to keep a look out for such projects to learn from because if our Government does get serious about reducing the carbon footprint of our housing stock, we need to be ready to take up the challenge. ■

Prime Minister writes to recipient of the Emerging Talent in the Technology of Architecture Award

Sam Lambert ACIAT, the second recipient of the Emerging Talent in the Technology of Architecture Award and new aspirATion Chair for the Yorkshire Region received a letter congratulating him from his local MP, who just happens to be the Prime Minister! Rishi Sunak wrote to congratulate him and went on to write to P+HS Architects Director, James Almond to offer congratulations to the practice too, and in particular, to express his support for apprenticeships. It is great that Architectural Technology has been recognised by the PM and congratulations to Sam and the practice. ■

Membership news

Chartered Architectural Technologists

We would like to congratulate the following who successfully attended their Professional Interview and are now Chartered Architectural Technologists, MCIAT:

017257	Stewart Anderson	Northern, 01
025918	Jessica Harden	Yorkshire, 02
030725	Ryan Murphy	Yorkshire, 02
036960	Lyndon Foster	North West, 03
034358	Richard Bollands	East Midlands, 04
022125	Samantha Coupland	East Midlands, 04
034208	Joseph Lawson	East Midlands, 04
027630	Michelle Nkhata	East Midlands, 04
033411	Jack Taylor	East Midlands, 04
023317	Joseph Bayley	West Midlands, 05
031679	Zoe Brittle	West Midlands, 05
028387	Amy Kirby	West Midlands, 05
035934	Richard Brailsford	Wessex, 06
031526	Matthew Halmshaw	East Anglia, 07
034945	Millie Gardiner	Greater London, 09
028546	Stephen Manning	South East, 10
037075	Stephen Rider	South East, 10
021950	Alan Wright	South East, 10
031109	Tiffany Fernandez	Channel Islands, 11
030247	Joshua Matthews	Channel Islands, 11
034726	Samuel Peek	Channel Islands, 11
033765	Daniel Tibbs	Channel Islands, 11
025287	Christopher Holmes	Western, 12
025176	Alexander Inniss	Western, 12
035604	Brogan Paton	Western, 12
023066	Martin Robertson	Scotland East, 14
036296	Hannah Coghlan	Northern Ireland, 15
025319	Craig Edwards	Wales, 16
034291	Sinead De Faoite	Republic of Ireland, C2

Welcome back

We would like to welcome back the following Chartered Architectural Technologist:

32598	Paul Booth	Yorkshire, 02
26932	Andrew Bodenham	North West, 03
29628	Paul White	East Anglia, 07
19927	Tristan Bund	Western, 12

Fellow Members

We would like to congratulate the following Chartered Architectural Technologists who successfully completed their application and are now Fellow Members, FCIAT:

020997	Michael Huston	Northern, 01
027723	Christian Richards	Yorkshire, 02
024645	Peter Stead	Yorkshire, 02
014391	Justin Dean	Wessex, 06
016390	Richard Bedford	East Anglia, 07
023711	Daniel Hawkes	Central, 08
016096	Patricia Mulvey	Republic of Ireland, C2
025094	Christopher Day	Middle East & Africa, C7

In memoriam

We regret to announce the death of the following members and affiliates:

001870	Richard Welfare	Northern, 01
009035	Joan Zunde	Greater London, 09
003581	Christopher Goulton	South East, 10
002605	Gordon Tucker	South East, 10

Obituary:
Joan Zunde MA BA(Arch) HonMCIAT (30/06/1928-10/12/2022)

The Institute was saddened to learn of the death of one of its Honorary Members in December, Joan Zunde. Joan was an architect who taught design procedures and technology to students on a variety of courses and was the author of several design books, including *The House Hunter's Handbook* (1983) and *Integrated Strategies in Architecture - Technologies of Architecture* (2006).

Graduating from Levenshulme High School for Girls in 1946, she studied architecture at the University of Manchester and began her professional career in 1951 as an architect for the City of Coventry, moving to City of Birmingham in 1955 as a senior architect. The Institute came to know Joan when she taught in Sheffield in the 1980s and for her work bestowed Honorary Membership to her at a presentation on 23 March 1988. It was given "for her tireless work for and on behalf of Architectural Technicians' education, and her contribution to the open learning debate had been second to none". In addition, the citation for her award paid special tribute to Joan's role as the driving force behind the creation and development of the Design Technology Project established in co-operation with Sheffield City Polytechnic and BIAT, as a distance learning course for Architectural Technicians. Joan was able to join in the Institute's 50th Anniversary celebrations at The Savoy in 2015.

ARCHITECTS BENEVOLENT SOCIETY

HOSTED BY

GLENN HOWELLS ARCHITECTS

A 5km run through London raising funds for the architectural community. After party to follow with food, drink and prizes. You can sign up as an individual or get your practice together and create a team!

SIGN UP NOW

www.absnet.org.uk/chickenrun23

Architects Benevolent Society

CHICKEN RUN

Saturday 3rd June, 2023

Sponsored by

CIAT

Charity no 265139. A company limited by guarantee.
Registered in London no 1084747. 6 Brewery Square, Copper Row, London SE1 2LF

Registered with FUNDRAISING REGULATOR