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AWARDS

2024

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Thank you to all our entrants and congratulations to all our Finalists

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Editor
Adam Endacott
Deputy Editor
Tim Fraser
editor@ciat.global
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
Eddie Weir PCIAT
president@ciat.global

Chief Executive
Tara Page
t.page@ciat.global

Head of Practice & Technical
Diane Dale
d.dale@ciat.global

Head of Education
Dr Noora Kokkarinen
n.kokkarinen@ciat.global

Head of Membership
James Banks
j.banks@ciat.global

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

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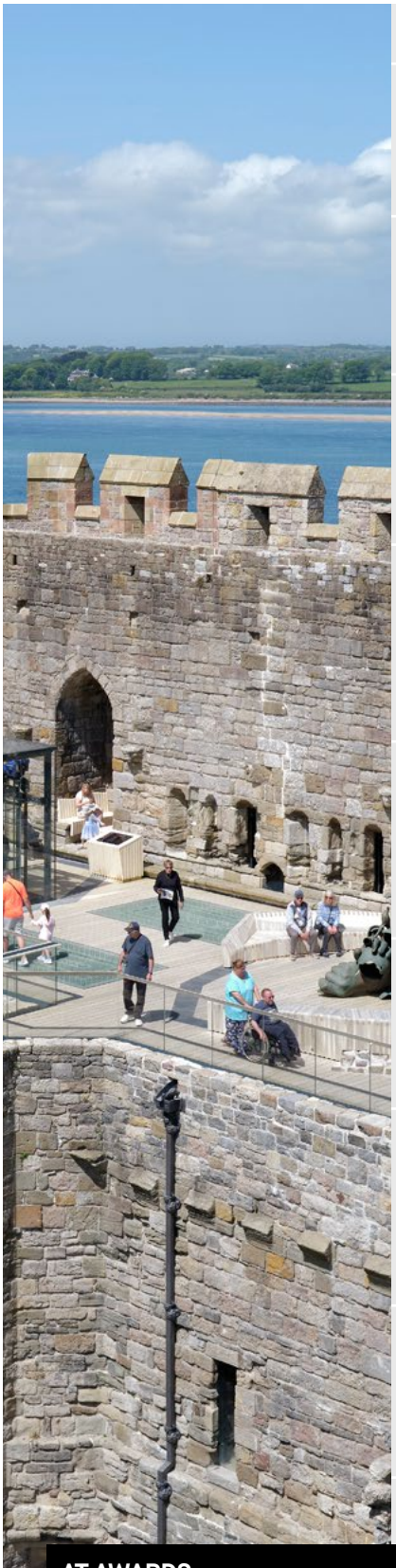

Editor's welcome

Welcome to our very special bumper issue of *ATJ*, celebrating the AT Awards 2024, which took place on 25 October and showcased some of the most remarkable projects and talented ATs in Architectural Technology today. This issue takes you through the award-winners in each category, with our winners and judges illustrating what makes each project unique, superlative, and, well, award-worthy.

For the first time ever, the AT Awards took place at the impressive, Grade I listed Christ Church in Spitalfields, East London. Designed by legendary Baroque architect Nicholas Hawksmoor and consecrated in 1729, its over-sixty-metre spire dominates the skyline of the surrounding high street. It was a fitting place to celebrate excellence in building design and function, especially when you add in a dancefloor in the crypt, with CIAT's very own Education Officer Lizzie Cowie DJing the afterparty.

It's my very first AT Awards, and it's been amazing seeing everyone's hard work come together to create such a well-organised event that celebrates the pinnacle of the industry. Next year's AT Awards open on 4 February 2025, so if you'd like a chance to gain some prestige and plaudits of your own, make sure you note it in your diary and submit an entry when the time comes. You can also nominate a fellow member or affiliate so get thinking about whether there's anyone you'd like to be honoured, too.

Elsewhere this issue, Lee Smith FCIAT investigates industry salary standards and lays down the facts when it comes to how much you should charge for your work. After an infographic Lee posted on LinkedIn about pay and finding your break even rate caused a lot of conversation, he expands it to a full-scale article that delves into what you can do to maximise your profitability as well.

We also have an introduction to CIAT's new Policy and External Affairs team, who are aiming to give Architectural Technology a stronger voice in sector policy discussions. With a new UK Government promising 1.5 million new homes, there is no better time than now for this exciting new branch to fight the fight to get the profession noticed and the professionals hired.

Hope you enjoy this issue; our largest ever!

Tim Fraser
Deputy Editor

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Winner 2024

THE ASPIRATION AWARD FOR EMERGING TALENT IN AT

Luke Siddle MCIAT

Words by Joe Davenport MCIAT, Chartered Architectural Technologist

The fourth recipient for excellence and achievement demonstrated by a professional within Architectural Technology.

The coveted title 'Emerging Talent in AT for 2024' is for an exceptional individual who is a student or Associate member, an affiliate or a Chartered Member (qualified within the last five years) and has demonstrated commitment and aspiration to Architectural Technology as an emerging talent in their professional development and career within the last five years.

Luke's enthusiasm, commitment and discipline set him apart from the average Architectural Technologist. As well as the inveterate attention to detail of all dyed-in-the-wool ATs, his faultless professionalism and organisation skills make him a pleasure to work with and means his work is to an exceptional standard and always reliably punctual. Despite being handed significant responsibility for someone of his short career experience, Luke remains composed and continues to excel, pushing others to succeed and improving the standards of those he works with internally and externally. I firmly believe that with his skills, working ethos and his determination to achieve technical excellence.

I've had the pleasure of working with Luke on a variety of projects and had the good fortune of monitoring his development and accomplishments here at P+HS. Having worked closely together over the past 3 years.

Prior to Luke joining P+HS Architects he studied BSC (Hons) Architectural Technology at Leeds Beckett University from 2017-21 with a placement year in industry prior to his final year. Luke contacted us during his final year at LBU and had a very successful interview shortly after. During his interview he provided examples of the projects he had been involved in during his studies and his year out placement. There were a few things that really stood out to us as a company searching for young talent, first being Lukes's eye for technical detailing, he shared with us some hand drawn, to scale drawings which not only showed his understanding/knowledge of construction but displayed a skill that in recent years has been lost due to the developments in technology. The second quality that he showed was his leadership skills in group projects, this is a vital attribute for a good technologist, leading a group project was always going to have transferable skills into working within a design team in practice. The last part of Luke's interview that was noted was his ability to manage and work through the adversity of COVID. He graduated in 2021 with a First-Class Honours degree, which in a time of uncertainty was a brilliant result.

Shortly after graduating, Luke joined P+HS Architects as an Architectural Technologist and it was clear that the same passion and work ethic from his studies transferred immediately into this career. From the off, Luke showed a willingness to learn and wanted exposure to as much of the job role as possible. The first project involvement he had was in the healthcare team as technical support for a new Emergency Department in Scunthorpe. During this period, he helped the team with the production of stage 3, 4 and 5 drawings, schedules, specifications and covered as project lead when team members were out of office. Luke often went above and beyond to ensure the work was completed, reviewed, and amended to the highest quality and never settled for 'good enough' which was brilliant to see. During these early months at P+HS he built strong relationships with colleagues and external consultants through his enthusiasm and commitment.

After Luke's first six months it was clear that he was ready to progress from a technical support role and start taking on more responsibility. This is something Luke had mentioned during his first PDP (personal development plan) review, and we were more than willing to provide him

with these opportunities. In November 2021 Luke was nominated as project lead for a GP surgery extension and refurbishment in Rochdale. This allowed Luke to be more independent and develop his skills in meetings and on-site, regularly liaising with the design team, contractor, client and statutory authorities. During his time working on this scheme, he completed drawings such as 1:5 construction details, internal partition types and setting out plans, and external wall types and setting out plans. Another important attribute Luke had to develop was reviewing and commenting on sub-contractor information, he methodically checked drawings and provided vital feedback, ensuring it was in line with his design. I guided Luke in the right direction during this period, but as time passed, I became less and less involved. Due to him still being very early in his career we did undertake a lot of reviews and drawing checks, but it was clear that he was taking it in his stride, proving that he was more than capable of stepping up.

When the Rochdale project moved into RIBA stage 5, Lukes's availability increased, and we felt it was the right time to give Luke a larger scheme to run as project lead - Scunthorpe Same Day Emergency Care Unit. This was a refurbishment of the old Emergency Department which included a range of acute healthcare services with the constraints of working on an existing building. This new challenge saw Luke having to think on his feet and problem solve in high pressure situations. Not to mention he was still visiting the Rochdale site and dealing with site queries. Due to the nature of refurbishment, Luke faced challenges such as discovering unknown constraints during demolition. For example, the Contractor identified a structural column and shear wall which was unknown during the earlier design stages, Luke resolved this in a professional and calculated manor by providing design options to the team for review and comments. The updated design was signed off by the client shortly after, with no delays to the construction programme. Furthermore, this project required a huge amount of high-level coordination with other consultants, ensuring all clashes were dealt with in the design stages, reducing issues on site. This period was a huge learning curve for Luke and helped shape him into the technologist he is today.

A year into his employment at P+HS, Luke made it clear that becoming a Chartered Member was a huge aspiration for him and set the goal to submit his application within a 12-month period. Needless to say he passed with flying colours and gained extremely positive feedback. It was a proud moment to see Luke walk out of the interview room with a smile on his face, a massively well-deserved moment. Having completed his MCIAT at the age of 24 it was a shining example to the junior members of staff at how you can excel if you push yourself and dedicate extra hours outside of the office.

Moving up the ranks into a more senior role, Luke is now acting as a mentor to one of our junior technologists, Ben. Since taking on the mentor role, Luke has shown clear commitment into helping Ben's development, similar to how Luke started at P+HS. His guidance and encouragement have really helped Ben in the early stages of his career. In addition to the help during work hours, Luke also offers his time to review and provide feedback on Ben's college work, which is a true reflection of his personality and character. Not only is Luke mentoring junior staff day to day, but he is also relied upon for support when it comes to the MCIAT interview preparation. Luke often sits down with colleagues undertaking the MCIAT interview and guides them based on his recent experiences.

The level of technical ability and eye for detail that Luke showed in his interview has really proved to be a key part of his success and competency. Luke has developed an extremely strong understanding of 1:5 technical detailing and presents his drawings clearly, including all the relevant information required. Over the past year, Luke has served as the technical lead on several projects from RIBA Stage 4 onwards. This stage is typically when we deliver the 1:20 and 1:5 details. Most recently was a modular construction project located in Poole, Bournemouth which is due to start on site later in the year. This was Luke's first experience working on a modular project, but he quickly adapted and asked all the right questions. Despite limited information from other consultants, Luke took the initiative in Design Team Meetings, frequently requesting the necessary details to ensure everything was meticulously coordinated for his tight Stage 4 deadline. Luke has now established himself as a trusted member of the technical team for advice during the technical stages of a project.

A year into his employment at P+HS, Luke made it clear that becoming a Chartered Member was a huge aspiration for him and set the goal to submit his application within a 12-month period.

More recently, Luke has been putting his mentoring and technical detailing skills into practice by visiting Leeds Beckett University as an Alumni, helping with the detailing workshops. These sessions have involved Luke sitting down with each student in a 1-1 session, allowing the students to present their work and ask questions. Luke not only provides valuable feedback and advice to the students but acts as a role model figure (it was only 3 years ago that Luke was sitting in their seat). After speaking with Luke's university tutor, she expressed immense gratitude and pride in seeing him return to campus to give back to the university where he studied.

To summarise, we think Luke's accomplishments during the past three years are a huge credit to him, and we're excited to see what the next three years hold. He has gone from strength to strength, starting as a graduate fresh from university, to becoming a Chartered Member of CIAT, a mentor, a project lead with a portfolio of projects and an established member of the technical team.

Luke is a shining example of a young technologist with the self-motivation, drive, and talent to succeed. In addition, he has seized opportunities to support his career through additional learning and the MCIAT accreditation. As he continues to expand and share his knowledge, he has become a respected mentor and ambassador for CIAT and P+HS, inspiring the next generation to follow in his footsteps. From an employer's perspective, we are not only impressed with the value that Luke has brought to our team and projects, but in him we see a rarer quality: a young man with an inherent love for the craft of Architectural Technology and a passion for excellence. He is indeed a talent to watch for the future.

Finalists

THE ASPIRATION AWARD FOR
EMERGING TALENT IN AT

Zarja Krevelj ACIAT

Zarja is a passionate, caring, and creative person, with sustainability and thoughtful design very close to her heart. Her desire to make a difference in people's lives is evident throughout her experiences and work in her field of expertise. She is committed to furthering the sustainability agenda in the world of Architectural Technology and more widely in the design and construction industry, having already made significant contributions to this goal with various lauded studies and reports. Her impact on Architectural Technology is evidenced not only by her innovative research pieces, active involvement in the local industry, and international experiences, but also by the impression that she leaves on colleagues, contractors, collaborators, and clients. She is an energetic and inspirational young design professional who is sure to have an even bigger impact on Architectural Technology in the coming years of her career.

Her vision encompasses not only technological advancements but also a holistic approach to design that considers environmental, social, and economic factors. Zarja's involvement in various R&D projects and sustainability initiatives at BE-ST and HLM Architects illustrates her proactive approach to shaping the future of Architectural Technology. In her role as a Change Maker at BE-ST, she is actively driving the 'Alt future' project which will illustrate the vision that Zarja and her peers have through illustrations and diagrams. The project promotes holistic and regenerative principles across Scotland. These principles will hopefully become practical applications which reflect a forward-thinking vision that aims to create a more sustainable and resilient built environment. The vision she has for the industry is very inclusive, progressive and empathic to people as well as built environment.

Dan Tibbs MCIAT

Dan Tibbs is a valued member of the JG Architecture Team. Since joining in 2017 from Sixth Form, Dan has shown an eagerness to progress as an Architectural Technologist with a keen can do attitude. Dan firstly completed his Construction and the Built Environment apprenticeship, where he received Apprentice of the Year, and more recently gained his MCIAT (December 2022). Dan strives to excel in all areas however has a natural ability in the Technologist space and excels in technical design. Dan also has been the go-to CAD member in our team and goes above and beyond by creating templates and working with the team to do this. He is a strong mentor and role model within the team often heard discussing technical issues with junior members of staff. Dan consistently goes above and beyond in his work and commitment to the practice, CIAT and Architectural Technologist career. In addition, Dan is aspiration Chair for the Channel Islands Region. With this role he has been a key contact for students to discuss professional routes with as well as trying to gain degree level locally.

Dan extends and reaffirms his knowledge of the building regulations daily through assisting colleagues with queries and difficulties they have interpreting or unaware of regulations. Dan's understanding of the building regulations allows him to provide quality assurance of detailed drawings through thorough checks prior to submission to authorities and/or clients.

With Dan progressing within his role at JGA he has naturally trained others to take on roles and responsibilities he had undertaken allowing him to progress. This will continue to be used so that he can develop further in his career.

ASPIRATION AWARD FOR EMERGING TALENT IN AT AND CHARTERED ARCHITECTURAL TECHNOLOGIST OF THE YEAR

Meet the Judges

Chair: Alex Naraian PPCIAT MCIAT

Alex is Group Head of Technical for Churchill Retirement Living – a national developer of Retirement Living Properties, employing over 700 employees across the group. A Chartered Architectural Technologist with over 35 years in the industry, he is an expert in delivering complex projects in the private sector.

Alex has also sat on various Accreditation Panels for universities offering Honours Degree programmes in Architectural Technology. As a mover and shaker in the industry, he currently sits on the NHBC Technical Forum and the HBF's National Technical and Sustainability Committee and is involved with the Future Homes Hub work on embodied and whole life carbon.

Alex has been a judge for the Building Innovation Awards, the WICE Awards, Association of Project Safety Awards and the LABC Awards. This year he has been invited as an industry leader to be a judge for the British Construction Industry Awards, which he has accepted.

Paula Bleanch MCIAT

Paula studied Architecture and Construction Project Management and her main field of expertise is in design management. Much of her work in industry concerned the design and build of large PFI (private finance initiative) projects, including award winning schools, offices, hospitals and library buildings. In 2008 Paula left industry to join the teaching team at Northumbria University, where she was final year tutor. She is now based in Denmark.

She has previously undertaken mentoring training as part of a scheme set up by the National Association of Women in Construction and has particular experience working as a female in the built environment sector.

Bharat Gohil MCIAT

Bharat is both a Chartered Architectural Technologist and Chartered Construction Manager. With over ten years in design and construction, Bharat specialises in offsite superstructure design and manufacture for construction. His solid technical background has assisted his development in the built environment, leading him to consulting designers and engineers in best practice for offsite design.

Bharat has leveraged his industry experience and technical knowledge to focus on digital construction. As part of his role as a Technical Specialist at Autodesk, he is driving change with sustainability whilst ensuring construction projects meet and exceed industry standards and expectations.

Joe Hyett ACIAT, aspiration Chair

In 2018, during his time as a student, Joe joined CIAT and its Regional Committee as Vice-Chair of aspiration Wessex and has contributed to the creation of the 'CPD in 43' series of lunchtime talks, collaboration events with other institutions, and the continued reinvigoration of the Wessex Region. He was appointed the position of Overarching Chair of aspiration at the end of 2023.

Joe studied BSc Architectural Technology and Design at the University of the West of England, where he was awarded the CIAT 'Outstanding Graduating Student in Architectural Technology'. He continued in education to complete his Masters of Architecture in 2021, during which time his thesis project was awarded the Wessex Prize and shortlisted for the President's Silver Medal. Since then, Joe has continued to demonstrate his dedication to the profession, completing the PGCert in Professional Practice and Management in Architecture in 2023. His involvement in education continues at UWE Bristol as an Associate Lecturer, tutoring on the BSc Architectural Technology and Design programme.

Gary Mees PPCIAT MCIAT

Gary has 49 years' experience in the industry and has been running his own practice for 19 years. He is a past President of CIAT, he now holds the position of the Construction Industry Council's Health and Safety Champion along with this, Chairing Keeping Pace With Change Working Group, which is a Construction Industry Advisory Committee (CONIAC) initiative.

His contributions externally have included a presentation at the Association for Project Safety 2013 Convention, in Belfast, on the potential implications of the CDM Regulations on designers and as part of a Panel for The Build Show held in October 2015. He has been a judge on the APS Student Award Scheme and an External Examiner for Robert Gordon University.

Chris Yorke MCIAT

Chris is a Chartered Architectural Technologist and Chartered Building Engineer who runs a small practise in Worksop, Nottinghamshire. Having started out as a trainee quantity surveyor, Chris made the move into architectural practice in 1988, initially working on large scale housing rehabilitation projects and later widening his experience to schools, sports pavilions, children's care facilities and heritage projects. Working up through the ranks, he ran many successful projects from inception to completion and was a team leader (Principal AT) before leaving in 2006 to start his own practise. He has also worked as a client-side advisor and facilitator on larger housing regeneration projects involving affordable housing and mixed development, which included working alongside senior representatives of the Commission for Architecture and the Built Environment.

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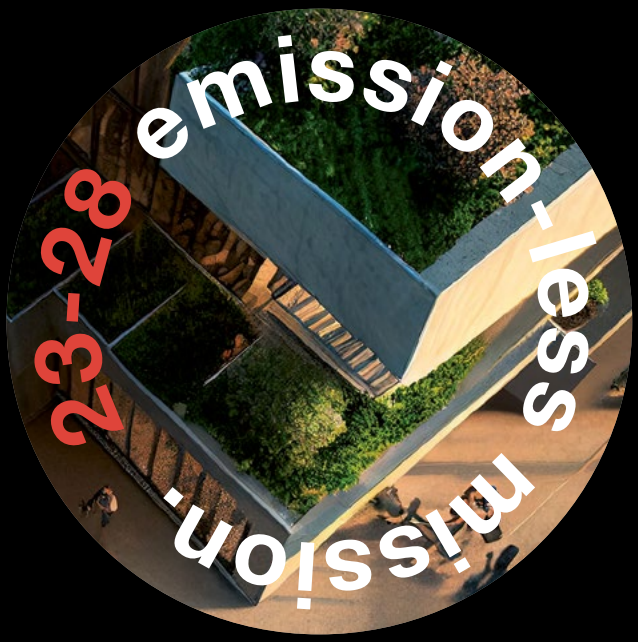

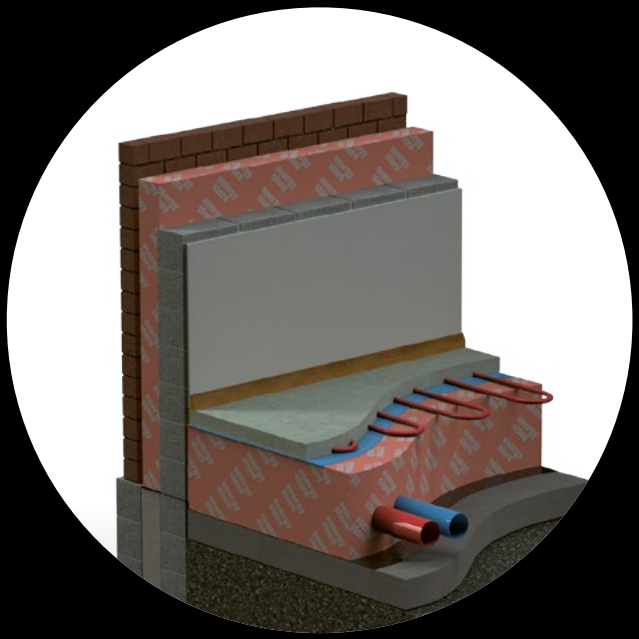

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Winner 2024

CHARTERED ARCHITECTURAL TECHNOLOGIST OF THE YEAR AWARD

Claire Raftery MCIAT

Words by John Heaney MCIAT, Chartered Architectural Technologist

The Award is for an individual's contribution in achieving excellence as a Chartered Architectural Technologist in the profession and discipline of all areas of Architectural Technology

Claire is an outstanding Chartered Architectural Technologist. She applies the technology of architecture to her role with passion and pragmatism. Not only has her creativity, innovative approach and technical prowess, combined with a sound business acumen, shot her into a leading role in her short career; she has played a pivotal part in placing ECD Architects as industry leaders in the retrofit and fire remediation sector, as well as being an AJ100 practice for the last 2 years and receiving nominations as Architectural Practice of the Year in the Building Magazine Awards. Well respected by clients, consultants and colleagues, Claire has established a foothold within the industry, presenting her experience throughout the industry.

Claire currently works as an Associate Director at ECD Architects, with responsibilities for managing a team, managing projects and manging clients. ECD is an architectural practice with offices in central London, Glasgow and Preston, with the London office, where Claire is based, working predominantly on social housing. Claire has particularly cultivated her skills in fire remediation work and retrofit; projects that leave residents safer and warmer in their homes, benefitting society at large. The practice is part of a larger group of companies called the N-able Group, and Claire has made strong connections throughout the group, learning from and sharing knowledge with project managers, fire specialists and Principal Designers.

Claire joined ECD at the start of 2019 as an Architectural Technologist, and quickly took on responsibility for running projects independently. Consequently, she was promoted to the role of Associate in early 2021, taking on line management duties and taking the day-to-day lead of small teams of staff on larger projects. Her skillset quickly saw her promoted to Senior Associate and into her current role as Associate Director of a team of 15 staff.

A wide range of skills are required in Claire's current role. She oversees several large projects, ensuring staff have the information they need, are appropriately resourced and working efficiently. Meanwhile she helps clients to formulate their briefs and subsequently to meet these, keeping them updated with projects' development. This guiding role allows her to exercise her creativity, solving the complex requirements of existing buildings in imaginative and innovative ways, while ensuring they meet regulatory requirements. She is also involved in the financial monitoring and planning of projects, integrating her understanding of how projects are likely to be delivered with the resourcing of the team. Her responsibility to the team extends to line managing other staff, ensuring they're enabled to flourish and helping to solve challenges that they face in the office. While her technical skill is a key part of her rise within the practice, her personable nature and caring attitude are key to her success with both staff and clients. Given her integral role in the practice, Claire is also involved in the practice's management. Her skill in strategic thinking sees her making useful contributions in meetings, proposing more efficient ways of working and perceiving potential challenges and finding solutions for them.

Claire's commitment to her work is evident in her proactive approach to collaboration and data management. One of her many successful projects was her first project as a junior Technologist: a 22-storey recladding of Denning Point in London for East End Homes, where Claire worked with her team and the ECD BIM team to improve data organisation, sharing, and visualisation. Her leadership of the Retrofit Working Group ensures best practices are shared across the N-able Group. This initiative emerged from Claire's work on 302 council-owned homes on the Netherfield Estate in Milton Keynes, funded through SHDF Wave 1, and 381 properties funded through SHDF Wave 2.1.

Claire worked with Haringey Council on the design of 'whole house' retrofit works for up to 300 homes on the Coldfall Estate. The designs are based on dwelling assessments for each property, adhering to the PAS2035 compliance route. The homes are predominantly two-storey terrace properties, built in the same pre-war era, with a mix of external wall and roofing finishes. Whilst most homes are on the Coldfall Estate, there are 71 additional properties scattered across the borough. Claire believes Architectural Technologists should drive the push for cost-effective, low-energy designs to help deliver the most sustainable homes for Haringey. She led the team to develop designs that are adaptable for future use, addressing both carbon impact and lifecycle costs.

Working with Thanet District Council on five existing residential tower blocks in Margate and Ramsgate, Claire has supported the Client's aspirations to improve the towers' residents' safety and addressing their cost of living, whilst contributing to the Council's commitment to support Kent County Council's 2050 net zero targets. The project was the first in the practice to take advantage of two streaming funds (both the Social Housing Decarbonisation Fund (SHDF) and the Building Safety Fund (BSF)) to achieve these aspirations within the Council's tight budget constraints. Design quality to the local area was also a key part of the Client's brief, and this was achieved through material choices which provide texture and contemporary detailing to the tower blocks.

The depth and breadth of an Architectural Technologist's expertise was at the fore in the Thanet Towers project. Innovative technical detailing and high design quality, combined with a strong focus of on community involvement with a series of resident engagement days. Working with the Client at the early stages, and then with Contractor in delivery, has been both a success for the project, and also underlines Claire's capabilities at all stages of a project.

Claire also emphasises the importance of education in sustainability, and has presented at conferences and industry workshops, as well as internal Knowledge Cafés, on these topics and more.

Collaboration is central to the way Claire works and how she delivers on her aspiration. She takes what she learns from projects and finds ways to maximise their impact by working with others to increase efficiency and improve outcomes. As the scale of retrofit projects in the practice has grown, so has the amount of data to be managed. Perceiving the potential for better data management, Claire has worked with those on her team delivering projects and with the practice's BIM team to find ways to organise, share and visualise data. This reduces the chance of errors, and means staff spend less time on repetitive tasks. Meanwhile there are opportunities to see patterns within the data visualisation. For example, this might allow a contractor to use the same specification across a wider range of properties, saving money, allowing more homes to be retrofitted for the same cost.

Claire also leads the Retrofit Working Group, gathering experience from across the N-able Group and ensuring that best practice is shared. She always listens to the various stakeholder viewpoints and negotiates the challenges that arise from different parties working on different aspects of the same projects. She provides clear actions on how these can be solved effectively, ensuring harmonious and efficient outcomes.

To ensure that sustainability is kept on the agenda, Claire believes Architectural Technologists should be pushing the performance of their designs to be both cost effective and low energy. Architectural Technologists are in a unique position to further advance the sustainable building agenda within the construction industry. With a foundation of exploring and understanding technical building solutions Architectural Technologists can help to upskill the building industry to deliver viable Net Zero schemes. Within the sustainability sector, one of the greatest challenges is producing low energy design that meets the clients budget expectations. Often a project will start out with loose sustainability targets such as 'Passive house principals' or 'Part L plus' and these then get watered down further when the project budget is stretched.

Claire is generous in sharing her knowledge and experience both within and outside the practice. She has spoken about the practice's large scale retrofit work at an Architects Climate Action Network (ACAN) event, inspiring younger architects and technologists that retrofit is a real, tangible route to addressing the climate crisis, as well as fuel poverty. As a contributor to the Social Housing Retrofit Accelerator she also spoke to social housing providers looking to retrofit their stock under the Social Housing Decarbonisation Fund. She provided webinars giving technical answers to the challenges these clients faced, again helping them see that large-scale retrofit is not just a theoretical possibility, but is being delivered in practice at homes across the country.

While this encouragement is key, for many potential retrofit designers the confidence to get started on retrofit projects is best gained through specific learning. ECD were the lead contributors to The Retrofit Academy's Retrofit Designer course that will help to give this confidence. Claire's module on Large Scale Retrofit gathered her learnings from the preceding years' work, helping others to realise retrofit projects of hundreds of homes at a time, in a safe way without unintended consequences. It touches on resident engagement, health and safety, surveying, data management and property ownership, all with the focus of delivering better homes.

Claire's view is that Architectural Technologists are in a unique position to further advance the sustainable building agenda within the construction industry. With a foundation of exploring and understanding technical building solutions, Architectural Technologists can help to upskill the building industry to deliver viable Net Zero schemes. To ensure that sustainability is kept on the agenda, Architectural Technologists should be pushing the performance of their designs to be both cost effective and low energy.

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Finalists

CHARTERED ARCHITECTURAL TECHNOLOGIST OF THE YEAR AWARD

Jon Clayton MCIAT

Jon is a Chartered Architectural Technologist based in Norfolk, England. With over two decades of experience in architecture, including more than ten years as a sole practitioner, Jon founded the Architecture Business Club to support architecture professionals worldwide. His weekly podcast, launched in November 2023, has quickly become a valuable resource for small firm architects and sole practitioners. Jon's mission is to help these professionals free up their time and build profitable, sustainable businesses that align with their lives.

Jon's work has had a significant positive effect on the architecture community. Through his podcast, he has shared invaluable insights and practical advice from top business experts and industry professionals. This has enabled many technologists, architects and designers to improve their business practices, leading to increased profitability and work-life balance. Jon's efforts have fostered a sense of community and collaboration among architecture professionals, providing them with the tools and confidence to succeed.

Jon's journey from a struggling sole practitioner to a successful coach and podcaster serves as an inspiration to others in the architecture profession. His story demonstrates the importance of continuous learning and the value of seeking support and guidance.

Jake White MCIAT

Jake's exceptional work on our home, from concept to design and delivery, culminated in our award-winning residence. From our very first meeting it was clear that Jake possessed a blend of creativity and professionalism with an ability to listen and carefully translate our ideas into a truly impressive and exceptional family home. Jake managed to capture our aesthetic preferences and functional needs perfectly, along with his understanding and previous experience of energy efficiency. He helped us create a home that not only met but exceeded our expectations and has delivered on energy efficiency. The final result speaks volumes about Jake's architectural design and commitment to the project. Our home is not only beautiful and functional but is now award-winning and is testament to Jake's exceptional and innovative design and meticulous attention to detail.

Since working on our home Jake has moved on from Morgan Carn Architects and has set up his own practice Jake White Architecture. From speaking to Jake this is a big step but one which has been a long time coming. The delivery of our home and another unique dwelling in Cuckfield is beginning to act as a springboard for his future career in architecture. We also understand he is expanding his skillset further into the virtual worlds and Digital Twins as it seems more and more technology is blurring the line between these various roles. Working with Jake has been a positive and rewarding experience and I would have no hesitation in recommending him to anyone looking for someone to create and transform a vision into reality. We hope that our project is a stepping stone to many more great things to come.

Recipient 2024

GOLD AWARD | CELEBRATING AN OUTSTANDING MEMBER

The Gold Award recognises and celebrates the dedication and commitment of Chartered Architectural Technologists who have demonstrated a significant contribution or outstanding service to the Institute.

There is a maximum of ten Awards presented annually to Chartered Architectural Technologists who have changed, developed or advanced the Institute, by solid, demonstrable and outstanding achievement.

The recipients for 2024 are:

Dr Matthew Brooke-Peat FCIAT for outstanding services to the Institute.

Matthew can only be described as an exemplary member of the AT community. His dedication, commitment and service to the Institute and its members is immeasurable. He serves to lead by example as an outstanding member of CIAT. Whilst he has served as a highly valued and trusted member of the Yorkshire Regional Committee, since 2008, his work for CIAT extends far beyond his Regional roles. In fact, we'd describe his role as Regional Treasurer, since 2015, as 'light' duties.

To fully understand the magnitude of Matthew's impact to CIAT is to appreciate his dedication and commitment, particularly to education, within CIAT by starting at the very beginning. During 2009-13, Matthew served as the Region's Education Officer and has since held a position on the Education Board for over ten years, where Matthew has made a significant contribution and impact. Matthew served as Vice-President Education from 2019-21. In addition to this, he sits on the Construction Industry Council's Education and Future Skills Committee.

Matthew has added significant value to CIAT and has undertaken many roles that has complemented his role within education, including being the Chair for Student Award Judging Panels for the AT Awards, and being part of the Accreditation visit panels for universities.

For membership, Matthew has been a POP Panel Assessor and was part of developing the MCIAT Professional Assessment route. His expertise is extensive, and his voluntary work allows him to sit in a niche and prestigious role within the Institute.

Matthew's specialisms within his research profile lie distinctly within sustainable design and thermal performance whereby he has contributed outstanding examples of work to forward the Institute. He showcases his knowledge by presenting his research and findings to Regional members through CPDs. He continually supports the CPD offer at Regional level by helping to organise and taking part in the presentations. Matthew has long maintained and supported our link with CIOB within the Region.

Since joining the Institute on 13 November 2001, Dr Matthew Brooke Peat has naturally embedded his expertise and skills within the Institute, and he is undeniably distinguished. He stands to serve as an exemplary role model for the Institute, its members and the wider construction industry. His drive, dedication and passion is unwavering. He demonstrates clear commitment to driving the Institute forward, he serves as a guardian, ambassador and key driver of positive change to ensure ATs remain at the forefront of technology and knowledge within the built environment.

Matthew has not only demonstrated his achievements through the vast number of roles he has undertaken, but through the work that has come from the committees and groups which he has served. Matthew's achievements are outstanding and have made a significant contribution to the Institute not only in education but practice and technical design and research. He is our very own 'Golden Thread'. He has long served as a mentor as well as continually offering support and advise to Regional Committees and aspiration members. He serves as a guide, a sounding board and a fountain of knowledge. There is no doubt Matthew will continue to lead and drive the Institute forward as more advances in education unfold.

Recipient 2024

GOLD AWARD | CELEBRATING AN OUTSTANDING MEMBER

Michael Padraig O'Keeffe FCIAT for outstanding services to the Institute and Republic of Ireland Centre.

Michael O'Keeffe is a super positive and enthusiastic Chartered Architectural Technologist. At a young age, Michael first stepped into the role as Republic of Ireland Centre Education Officer and visited almost every AT degree programme in the Republic of Ireland, promoting membership and encouraging others to apply for Accreditation. This enthusiasm and passion set the stage, and nine years on, Michael continues to coordinate everyone and everything within the Centre in his role as Chair.

Michael leads by example and has taken on many other big roles within the Republic of Ireland Centre. He has been a pioneer for statutory recognition of the Architectural Technologists' Register and sits on the ATR Working Group, attending meetings with Ministers of State and representatives from Government Departments. He has volunteered and sits on the ATR Admissions & Assessment Board reviewing applications, and to date 95 ATs have been elected onto the Shadow Register.

On behalf of CIAT, Michael has presented at the National Construction Summit, the National Building Control Conference and the International Construction Management Conference. Michael has also travelled the length and breadth of Ireland to be a friendly face and CIAT representative at the Centre stand, at conferences including the International Congress on Architectural Technology, National Construction Summit and CIF Southern Construct Summit. All while keeping the membership up to date with the quarterly ROI Centre Newsletter. He has almost single-handedly taken charge of the newsletter content and editing, ensuring members and affiliates are fully aware of the work of Central Office and the Centre Committee locally. The significance of the newsletter is vast, reaching all members and increasing membership engagement. Public awareness of the Institute and the profession of Architectural Technology has further developed through Michael's work with the newsletter and positive social media engagement.

Michael has also represented the views of the Irish membership as Centre Councillor for two consecutive terms. During his tenure he also served on the Executive Board as Councillor Trustee.

Michael is a very busy man, dedicating much of his free time to promoting the Institute and the profession, but he always has time for fun and has attended many CIAT social events and gatherings. Along with the Centre Committee Mike has helped organise the first of many events including: CPD & Golf; CPD tour of the Guinness Storehouse; TUDublin AT Gathering; and Committee meetings coinciding with Christmas parties! Having attended every AGM since 2017, Michael is no stranger to a good Friday night social event! This positive social engagement has formed a vast network between CIAT ROI and industry leaders, sponsors and with third level academics.

His enthusiasm for the profession and Institute has no end, he is constantly engaging with members and offering support. Michael is always keen to encourage young members, he is wise beyond his years and has a wealth of knowledge within the industry. Mike has so much more passion to give to the profession and to CIAT. Michael is a super positive and enthusiastic Chartered Architectural Technologist. ■

He has been a pioneer for statutory recognition of the Architectural Technologists' Register and sits on the ATR Working Group, attending meetings with Ministers of State and representatives from Government Departments.

Recipient 2024

GOLD AWARD | CELEBRATING AN OUTSTANDING MEMBER

Professor Norman Gordon Wienand MCIAT for outstanding services to the Institute.

Norman Wienand, Emeritus Professor of Architectural Technology, is a recipient of the Gold Award due to his development and advancement of Architectural Technology education on behalf of the Institute for over 20 years.

Norman entered academia in 2001 following 15 years within the industry. Within a few years he became Subject Group Leader and then Head of Department in 2009, and held senior positions within Sheffield Hallam University (SHU) until his retirement in 2017. Throughout this time, he promoted and attained parity between the Architectural Technology and architecture programmes offered at SHU. This was achieved by having students on both programmes collaborate with each other regularly to understand the similarities and differences between both professions and in turn develop more well-rounded skills in both cohorts. He also championed parity at other educational establishments and shared his experiences in achieving this with others, offering praise for good practice and advice where possible.

Norman was a panel member for the Quality Assurance Agency's Subject Benchmark Statement (SBS) for Architectural Technology (for versions published in 2007 and 2014). The SBS is an instrumental document that outlines what graduates might reasonably be expected to know, do and understand at the end of their studies at either Honours or Masters level. The standards within the SBS have formed part the basis of CIAT's Professional Standards Framework for Chartered Membership. Norman also supported the Membership Department by taking part in the Professional and Occupational Performance (POP) Record assessments and lead on its review which took place from 2007-09.

Between the years of 2011-13, Norman served as the Institute's Vice-President Education and engaged with numerous educational establishments which offered Accredited, or prospective Accredited programmes by visiting their campuses and speaking to senior management and the programme teams. In 2012, he gained his professorial title for his work on the development of Architectural Technology as an academic discipline. This is evidenced by several chapter publications as well as conference papers between 2009 and 2014 on Architectural Technology education and teaching of sustainability which was likely part informed by the positions he held within the Institute and his engagement with other educational establishments.

He was the Chair of the Institute's Research Group from 2010-14 during which he led refinements to the Student Awards that are still in place today; the Project and Report categories. Even after retiring from academia, Norman has continued to engage with the Institute, by serving as a judge and later as a verifier for the AT Awards | Students.

In 2016, Norman was part of a small CIAT delegation which visited over 20 universities, practices and organisations in India, including the Council of Architecture, to promote the importance and value of Architectural Technology, the Chartered Architectural Technologist professional qualification and Accreditation. He has supported the Education Department by mentoring individuals on the path to becoming Accreditation Panel Chairs. He helped deliver Accreditation Panel training in 2020 to approximately 30 members which has kept the Accreditation process, and its standards, high.

Norman was committed to helping others improve by challenging the status quo and offering guidance, feedback and suggestions, and this is an indication of his dedication to the discipline and profession. Norman never shied away from giving clear directions if the situation required it and led others with the intention for them to be successful in the long term. It is because of these qualities and his involvement that he is considered a cornerstone for CIAT's education and membership heritage, making him a worthy recipient of the Gold Award. ■

GOLD AWARD | CELEBRATING
AN OUTSTANDING MEMBER

Meet the Judges

Chair:
Gordon J Souter MCIAT

For the first eight years of employment Gordon was in private practice with three small practices. As the practices were small, he gained a wide and varied experience quickly which has stood him in good stead through my career. During those years, Gordon was involved in projects from an attic conversion to a new hospital as well as bars, restaurants, factory units, health clubs.

In 1995, he joined a national housebuilding company and since then has remained within the housebuilding industry and is currently with Lovell Partnerships.

Having spent the majority of his career in the housebuilding industry it follows that Gordon's speciality will be housing of all descriptions, from multi storey flats to individual dwellings. Primarily he is involved in timber frame construction but traditional build poses no problem.

Gordon does not consider the projects he has worked on exceptionally noteworthy with the exception of one project which is the first six storey timber kit housing development in Scotland. He considers his main achievements to be ensuring the projects he works on are, from an architectural prospective, well managed.

He never tires of promoting CIAT at any opportunity and he represents the Institute on a number of committees as well as holding the role of Honorary Secretary.

Kevin Crawford PPCIAT MCIAT

Kevin has been a Chartered Architectural Technologist for almost 30 years with experience in both residential and commercial design. Prior to forming his own CIAT Chartered Practice, Crawford Architectural Design in 2009, Kevin was Architectural Manager for Bellway Homes (Scotland East) and Bett Homes in Scotland.

Crawford Architectural Design is based in the south side of Glasgow with an expanding network of clients. The practice specialises in residential and commercial design. It provides a full and tailored design package individual to each project, and offers bespoke advice for the production of SAP Calculations, thermal modelling and Energy Performance certificates that are legally required for new build domestic property.

Adam Newell FCIAT

As a Senior Chartered Architectural Technologist within BDP, Adam works within the heritage team on prestigious grade 1 national treasures. Adam has a range of experience ranging through small-scale to barn conversions, high-end residential, blue light services, through to extensive redevelopment projects of world heritage sites.

With a joint passion for sustainability, the built heritage, and how we integrate the use of BIM, Adam strives to push the boundaries through innovative solutions to deliver sustainable buildings that respond to the climate pressures, whilst being sympathetic to their cultural significance.

Graduating from Edinburgh Napier University in 2007, Adam continued to develop his career, gaining his MSc in Technical Architecture from Sheffield Hallam University in 2009, before completing his MA in Conservation and Regeneration at Sheffield University in 2013. The same year, he completed and gained Chartered status.

Adam continues to be involved with the Institute as a prominent figure within the Greater London Region where he is Regional Councillor. Adam represents the Region at a number of events and sits on various committees, as well as being part of the CIAT Mentor Match Me scheme providing support for the next generation.

Aled Rees FCIAT

Aled has acquired large but varied experience across several sectors within the construction industry with a wide range of projects including government, commercial, leisure, educational, infrastructure, healthcare and residential. He can work throughout all stages of the design, construction and specification processes and utilises his expertise to manage difficult and complexed projects with strict budgets and timescales. In addition to his invaluable on-site experience working closely with contractors, Aled is seen as a key link within any team.

Eddie Weir PCIAT

Eddie feels a huge sense of honour, privilege and responsibility in representing CIAT and the profession of Architectural Technology.

Eddie is the Principal Partner of Eddie Weir ADP, which since its conception in 1999, has grown into one of the most highly regarded Architectural Practices in Northern Ireland, with many projects throughout Ireland and the UK. During much of this time he has served on the Northern Ireland Regional Committee and proudly held the position of Regional Chair. He is an Executive Officer of the influential Northern Ireland Construction Group and the previous vice-chair of the Construction Professionals' Council of Northern Ireland. Eddie was honoured to be a recipient of the prestigious CIAT Gold Award in 2014.

As an Architectural Technology and Management graduate of the Ulster University with over 25 years' experience in practice, he is frequently invited to deliver presentations regarding Architectural Technology and architecture to other professional institutes and universities. Eddie continues to represent CIAT on numerous taskforces, councils and committees and speak on behalf of the Institute at government level and at major-industry events on issues regarding Architectural Technology and the wider industry.

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Commended 2024

STUDENT AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY | PROJECT

Whitefriars Rehabilitation Centre

Words by Anthony Richardson, Coventry University

My project is a rehabilitation centre dedicated to helping people establish their new normal and to get on with their lives through dedicated residential and day rehabilitation services. For people with neurological conditions, stroke, spinal injuries, acquired brain injuries, orthopedic and other complex trauma injuries.

The proposed site is situated along White Friars Street near the A4053 Ring Road. The White Friars Museum is located on the other side of the Ring Road to the east and the White Friars Gate is located adjacent the site on the western boundary. Located on the northern boundary of the site is the Alison Gingell Building, part of Coventry University.

The Alison Gingell Building provides higher education programmes with state-of-the-art facilities for students to simulate a range of occupational related tasks in research laboratories, health subjects, analytical laboratory, sports science labs and community houses. Given the proximity of this building and the nature of the programmes, there could be a case for providing a care home for people of working age, specialising in neurological and physical disabilities, such as amputee patients in rehabilitation. This was the inspiration for the project.

The proposed function for the site is to be a care home specialising in rehabilitating people with physical disabilities and amputees and a research facility for Coventry University. Potentially a specialist rehabilitation centre where university programmes in mechanical and electrical engineering and health care services in the Alison Gingell Building can advance their knowledge of orthotics and prosthetics, to enhance rehabilitation and later living for the local Coventry population and further afield. The site is an existing car park and recreational space adjacent to the Alison Gingell Building.

The whole site sits on a bed of sandstone. Therefore, a lightweight superstructure would negate the need for deep expensive foundation designs. The site does present a risk of radon gas being present and the substructure design has considered measures to mitigate this via gas membrane barriers and underfloor ventilation.

The courtyard area is quite large providing scope for an interesting external landscaped area for residents. All the required rooms are accommodated within the design concept based on similar precedent studies. Thought was given to escape locations, circulation corridors and stairwells. The design makes good use of space on the site and replicates the southern boundary form.

The massing model demonstrated the building does overshadow the courtyard area. The southern wing of the building is kept to two stories to allow natural light to the northern wing, where the accommodation makes most sense to be positioned. The building helps to create a street scene on the northern boundary adjacent the Alison Gingell Building.

The main day lighting is provided to communal rooms positioned on the south elevation. Solar thermal heat

gain to the structure of the thickened concrete piers and curtain walling external acoustic façade, emits heat into the internal spaces when the sun sets.

The following solutions and regulations were incorporated into my rehabilitation centre design in accordance with all the relevant Building Regulations 2010 and the latest approved documents.

The main structural walls would be built from a timber frame structure and be insulated with a system such as the Rockwool Timber Frame Slab. Insulation products suitable for timber frame structure with fire class rating of Euroclass A1, smoke generation s1 and burning droplets d0. The ground floor slab could be built from a precast concrete beam and block proprietary system.

All double-glazed windows to achieve 1.4 W/(m^2·K) or Window Energy Rating (10) Band B minimum. Pilkington 'Optifloat' clear & tinted glazing. Extruded Polyester Powder Coated (PPC) Aluminum window frames to match the Allison Gingell Building. Blue and green roof systems allowing photovoltaic panels and plant to be surrounded by plant life, improving biodiversity, and slowing stormwater runoff whilst still allowing services on the roof. Windows to be airtight sealed with a suitable membrane and no trickle vents fitted or gaps unsealed. South facing windows to be tinted with UV filter to prevent overheating. Rapid purge ventilation to be provided via ceiling mounted extract fans running continuously at a low voltage and cooker hood extracts. The target U-value of this building's external walls, roof and ground floor is 0.11W/(m^2.K). This is in-line with the UK net zero target by 2050.

Accessibility is provided throughout the building and via a level access approach from the car park. Handrails to be provided to all resident and communal corridors to at least one side of the corridors. To be min. 900mm high (50mm min. from wall). All communal internal doors designed to allow 825mm min. clear opening. All staircases designed with min. 1200mm between strings. Handrails between 900-1000mm from stair pitch line. Continuous handrails to both sides of staircase for all flights and landings. Handrails min. 50mm dia. and extend min. 300mm top and bottom of first and last tread on all stories. External proposed level access ramps max. 1:20 fall and 1:40 cross fall.

Fire services dry riser's accessible to fire fighters and fire officers. External walls, party walls and party floors are all to be 60-minute fire resistance. Party floors based on 'Robust Detail - E-FT-6 Timber - Metal web joists – Cellecta ScreedBoard 28 system'. Airborne dB reduction of 64. Cavity barriers to prevent smoke and fire passing between dwellings within the cavities of the walls - to be a sleeved and of a non-combustible materials such as mineral wool/rockwool or similar. Emergency lighting to be installed to meet BS 5266. To be provided to the main escape routes. Fire alarm to be provided. Fire egress escape stairs and exits designed to be no more than 7.5m from the furthest point of any room on all stories in one direction and 30m in more than one direction.

In summary, my building design is intended to provide maximum use of the space available on the proposed site, the form responding directly to shape of the site. Providing permeability for access of the general public around the building whilst enhancing the public domain, green spaces and privacy to the occupants of the building. All whilst utilising modern methods of construction where possible and sustainable methods of design and construction that meet the latest Building Regulations and Design for Disabled Access requirements. Hopefully, bringing a useful function and amenity to the City of Coventry and the wider area.

Judges' comments

Anthony has taken on this complex project to design a rehabilitation centre on a very demanding site. A clear explanation of the scheme and compliance with regulatory standards. Judges were especially impressed with his reference to British Standards Fire Life Safety Design.

The building is meticulously developed throughout, with excellent attention to detail paid to the spatial organisation and user requirements. The Judges were unanimous in commenting on the well thought through external works creating an oasis in a busy city centre. The users of this proposed state of the art rehabilitation centre really are at the heart of this design. Equally his elevations are dynamically presented with good colour palette that really brings the design to life, helped further by Anthony's excellent material descriptions.

Worthy of special mention is the running detail. Taking up a whole board, this image is packed with technical information. This provides us with a comprehensive insight into Anthony's technical knowledge, it is good to see the attention given in locating such items as fire stops and barriers. ■

The building is meticulously developed throughout, with excellent attention to detail paid to the spatial organisation and user requirements.

Highly Commended 2024

STUDENT AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY | PROJECT

The Octagon

Words by Rebecca Wakely ACIAT, Anglia Ruskin University

The historic city of Ely, in Cambridgeshire, is home to a vibrant creative arts scene that reflects a dynamic fusion of history, traditional crafts, and modern artistic pursuits, making it a cultural hub in Cambridgeshire. 'The Octagon' aims to provide a centralised, accessible space for creative expression and community engagement, while promoting economic growth and preserving local heritage.

The development features thoughtfully designed studios with efficiency, sustainability, and future-proofing in mind, allowing for seamless future expansion or modifications. Adaptable studio spaces can nurture and aid local artists in developing their careers and gain exposure through the use of exhibition spaces. Promoting local artists aims to encourage younger generations to engage with the arts, supporting a sustainable, creative community long term.

As well as the studio and exhibition spaces, the scheme proposed a large, tiered, outdoor arena that serves as ramped access to the lower floor. Formed by retaining walls, the arena aims to be an event space for hosting exhibitions and festivals focused on Ely's history's, local folklore and traditions to enable future generations to connect to the city's cultural roots whilst embracing new, creative trends. Having flexible indoor and outdoor areas offer freedom for year-round event programming and fosters ongoing engagement for the creative arts, filling in gaps between major events.

Design concept
The design draws inspiration from prominent local historical landmarks in and around Ely, including Ely Cathedral and its iconic 14th Century octagonal tower, the distinctive gable ends of the former Ely Jam Factory, and the archways of Ely's original water tower. These elements are integrated into a contemporary aesthetic, utilising materials selected for their sustainability, build ability, and sensitivity to the local context—particularly the timber cladding reflective of the region's agricultural architecture.

Site analysis
A comprehensive site analysis identified key design opportunities and constraints that were critical to address from the early concept design phase. One significant opportunity was the potential to unlock expansive views of Ely Cathedral to the south by demolishing the existing 1980s sports hall. This intervention also enhanced pedestrian access from the car park to the studios, providing a more open and well-lit pathway. The proposed building placement was carefully considered to ensure the preservation of existing trees and their root protection areas

Orientation played a critical role in addressing overheating and glare control. A substantial overhang, combined with solar glazing, ensures effective shading, minimising solar heat gain during the summer while optimising sunlight and solar gain in the winter months, when the sun is lower in the sky. Each studio is equipped with adjustable shades and blinds, allowing occupants to control glare to their preferred levels while still benefiting from natural light. This approach was considered more suitable, given the flexible design of each studio to accommodate the individual needs of its occupants.

Primary structure
Various engineer timber systems were considered for the above ground primary structure. Further analysis concluded a Glulam post and beam arrangement was

better suited to achieve the desired aesthetic and flexibility. A three-pin truss with steel ties combined with a three-pin frame with finger jointed haunches reduced the need for internal load bearing walls and achieved a large unobstructed volume of space for the central atriums. The central atriums are intended to provide natural light throughout the building, especially to the central rooms.

The posts are set out on a 6m x6m structural grid to reduce waste of materials. The primary and secondary structure will be manufactured offsite in a controlled factory setting ensures a high-quality product and efficient project delivery. Assembling a standardized system is easier and quicker to install on site. This reduces risk of delays and additional costs to the client as a result.

Key considerations in specifying engineered timber included fire safety, moisture control, acoustic performance, and its durability and longevity. A crucial aspect of the fire strategy was ensuring the building's structural integrity for sufficient time to allow safe evacuation in the event of a fire. Timber's natural fire-resistant properties, through the chemical process of pyrolysis, slow combustion by creating a protective charred layer that shields the undamaged wood beneath. The façade is compartmentalised with vertical and ventilated horizontal fire barriers to prevent the spread of smoke and flames in concealed spaces. Horizontal cavity barriers with intumescent strips ensure proper drainage and ventilation while sealing the full width of the cavity in the event of a fire.

The external wall assembly incorporated multiple strategies to effectively manage moisture. These included the use of breather membranes, an air and vapour control layer (AVCL), and ventilated rain-screen cladding to ensure proper airflow. Careful detailing, such as chamfered horizontal cladding battens with EPDM tape applied to the upper edge, was implemented to prevent water accumulation on flat surfaces. This approach not only reduces the risk of rot and mould but also extends the façade's lifespan, with the goal of minimising maintenance requirements over the buildings design lifespan.

External façade

The contemporary external timber cladding was selected to represent the environmentally conscious approach taken for other elements of the building. Scottish larch was selected over Siberian larch due to supply chain issues, that it is sourced from FSC certified forests within the UK and lower embodied carbon due to the reduced travel distances. Treating it with a factory applied surface treatment sucVenh as SiOOX will ensure the façades weather evenly to a light grey.

Ventilation

Both mechanical and passive ventilation strategies were considered to ensure adequate ventilation preventing excess condensation build up and maintaining good levels of indoor air quality. A significant factor to consider specifying passive stack ventilation to reduce heating a cooling load was ensuring a suitable supply of air through openings such as windows and doors. Due to the atriums being use for exhibiting artwork, it is less than ideal to have windows an doors remaining opening for long periods of time, need for stack ventilation. Another reason as to why passive ventilation may not be suitable in this context is the building requires careful control of the indoor climate. Passive stack ventilation makes it harder to control and maintain consistent temperatures. For this reason, an MVHR system is proposed to minimise energy loss.

The thermal envelope

The thermal envelope is designed to exceed the minimum U-values set out in Approved Document L Volume 2: Buildings other than dwellings by 25% or better. Various ground floor, external wall and roof constructions and insulation types were explored; rockwool insulation was selected due it being able to achieve the require U value with and reduced wall thickness in comparison to wood fibre insulation.

Accessibility and inclusivity

Both externally an internally, the scheme was designed with inclusivity and accessibility in mind. This is achieved through both a stepped and ramped approach to the building at a 1:20 gradient with landings every 10m. Lifts and accessible toilets are centrally located within a fire protected lobby that ensures a wheelchair user does not have to travel more than 40m. Toilet facilities are specified to be visually contrasting to enable visually impaired people to navigate and use the facilities with ease.

Judges' comments

Rebecca's proposal shows a highly interesting project combining green and brownfield sites, making a design for the Octagon Cultural Hub that combines sustainable features with affordability and futureproofing in mind, in order to create an inspiring outdoor venue that will inspire an evening economy.

This is a well-balanced and professionally laid out project with great use of 3D visualisation, watercolour style images, which were noted as very fitting for an arts and cultural building, and well produced technical information.

It was clear to the judges that she had put a substantial amount of work into this project. The Judges highlighted the good level of attention to the Building Regulations and the practical application shown through her excellent detailing.

The Judges commented on the selection of important details. These are of a very high standard and showcase Rebecca's technical ability to detail correctly.

These details compliment the clear evolution of the design and highlight attention to the sustainability, safety and accessibility targets of the brief, while maintaining and complimenting the local character of the area. ■

Winner 2024

STUDENT AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | PROJECT

Cranwood Residence

Words by Harriet Paige Key ACIAT, Anglia Ruskin University

Nestled within the heart of Muswell Hill, Cranwood Residence represents a bold and forward thinking vision for sustainable urban living. This innovative zero carbon, multi-generational development seeks to transform a key area of Haringey, creating a vibrant and inclusive community that effortlessly blends residential, social and environmental spaces.

The development features 28 thoughtfully designed apartments, catering to diverse living arrangements and tenure preferences. With a mix of adaptable living spaces, the project prioritises inclusivity and comfort for residents of all ages and family structures. Sustainability is woven into every aspect of the design, from building technologies to construction methodology and the selection of environmentally friendly materials, minimising both embodied and operational carbon emissions. This not only reduces the project's overall carbon footprint but also sets the stage for a greener future.

As part of a broader masterplan, Cranwood Residence envisions the redevelopment of adjacent council homes, adding a new residential storey and introducing community-focused amenities such as a coffee shop and nursery. These additions are designed to support families, creating a seamless link from nursery to the adjacent St James Primary School. This well considered, family-oriented approach enhances the development's role as a community hub, enriching the lives of residents while integrating with the wider Muswell Hill neighbourhood.

Cranwood Residence goes beyond simply providing living spaces. It integrates a range of communal amenities to foster community cohesion among its residents. A ground floor community room and a landscaped rooftop terrace, complete with a greenhouse, serve as gathering spaces for social interaction and relaxation. These shared spaces, alongside landscaped public areas featuring

raised garden beds and a biodiversity enhancing swale, invite both residents and the local community to connect with nature. The incorporation of these green areas enhances the development's environmental impact, improving air quality and promoting healthier living.

At the heart of the development is a deep commitment to sustainability. The project embraces renewable approaches to water and energy management, taking advantage of the developments 42,000L swale to irrigate the landscaped areas and rooftop garden, recycling greywater and rainwater. While green energy is generated through traditional photo-voltaic panels to the flat sedum roof and Building Integrated Photovoltaic (BIPV) technology to the building fabric. The combination of which could generate enough to meet the energy needs of the development, while supplying excess power back to the grid. These practical solutions optimise the use of available resources, contributing to the development's environmental sustainability.

Cranwood Residence is designed with longevity and performance in mind. Cross Laminated Timber (CLT) is used extensively throughout the project, selected for its durability, thermal and fire-resistant properties, as well as its ability to sequester carbon. Paired with materials such as mineral wool insulation to provide superior fire resistance and thermal efficiency. By adopting Passive House principles, the development exceeds Building Regulations for insulation and airtightness, ensuring optimal energy performance and comfort for its residents. The Mechanical Ventilation Heat Recovery (MVHR) system, paired with an Exhaust Air Heat Pump (EAHP), captures and enhances waste heat from everyday activities, reducing energy consumption and contributing to the development's green credentials. Fresh air will be drawn in through 'chimneys' equipped with wind catchers, directing airflow through the pipework and distributing it to each apartments ventilation system. Exhaust air outlets are discreetly connected to air bricks integrated into the external wall, minimising visual impact on the façade.

Safety and buildability are key considerations, with prefabricated CLT panels and bespoke steel elements streamlining the construction process. Health and safety measures are integral to the design, with fire safety, fall prevention and compartmentalised spaces all a focal point to ensure the safety of residents. Retractable bollards and controlled vehicle access further enhance pedestrian safety within the development allowing access for emergency vehicles and preventing access to outside traffic.

While functionality and sustainability are central to Cranwood Residence, its aesthetic relationship with the environment has been equally considered. The building's massing and scale are thoughtfully designed to complement the natural landscape. The strategic use of volumetric design, with setbacks and stepped forms, breaks down the overall mass of the structure, allowing it to align with the site's natural topography. Winding pathways and carefully landscaped areas mirror the organic patterns of nearby Highgate Wood and Parkland Walk, ensuring a harmonious integration with the natural surroundings.

In effort to pay homage to the local Edwardian architecture, recycled red brick is adopted at ground level, maintaining the area's historical context. This traditional brick base transitions to brick slip panels on the upper floors, minimising raw material usage, weight and embodied carbon, while preserving visual continuity. These brick elements also feature projecting brickwork that add texture and craftsmanship to the façade.

Contemporary materials like zinc cladding, timber canopies and brise soleil introduce a modern edge, balancing traditional with contemporary. The cantilevered CLT balconies provide functional outdoor spaces while contributing to the rhythm of the building's façade, creating depth and visual interest. Combined with sustainable features such as green roofs, these design elements allow Cranwood Residence to blend seamlessly into both its urban and natural contexts, while making a bold architectural statement.

In summary, Cranwood Residence is more than just a place to live, it is a vibrant, forward-thinking community that fosters wellbeing and connection, both within its walls and broader Muswell Hill neighbourhood.

Judges' comments

Harriet's project exemplifies technical excellence and sustainable innovation in architectural design. She impressed with her concise yet comprehensive approach to her project with the rich mix of styles that really set this submission apart and captured the attention of all Judges.

The display boards demonstrate the wide range of skills Harriet possesses, showing an advanced understanding of the design process and a number of important agenda for the practicing Architectural Technologist. The work stands out for its clarity and richness of information. Providing multiple views of the design and including solar shade studies sets a benchmark for Award submissions.

She demonstrates a deep understanding of Building Regulations, integrating them seamlessly into an aesthetically pleasing design. Her thorough use of rainwater harvesting and PV integrated roof tiles sees Cranwood Residence exceeding Approved Documents to make the scheme a highly efficient and sustainable project.

Harriet has a great eye for detailing. This technically well resolved design solution presents a comprehensive range of key interface details. The Judges agreed she had been brave in her choice to display some of the more complex junctions, producing them to a very high standard and showcasing her simple yet effective strategies for Passivhaus and biodiversity.

This is truly robust project, presented with a professional layout and excellent use of technical details, annotation diagrams and 3D visualisations. This project stands out for its clarity, depth and thoughtful execution, making it a deserving winner.

Finalists

STUDENT AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | PROJECT

Colwick EcoLearning Haven

Van Son Tung Dinh, Nottingham Trent University

Colwick EcoLearning Haven at Colwick Country Park, situated approximately four miles southeast of Nottingham City Centre, is a multi-functional facility that includes an exhibition area, working and learning spaces, a café and a restaurant. The park, with its rich natural landscape and diverse flora and fauna, offers an ideal setting for this development. The design is inspired by the park's scenic lake views and aims to provide a high standard of environmental sustainability.

The design of Colwick EcoLearning Haven emphasises inclusivity and accessibility while integrating sustainable building practices to meet zero-carbon goals. The concept blends education, recreation and sustainability, harmoniously integrating with the natural landscape of Colwick Country Park. The building's functionality is enhanced by its architectural form, which maximises views of the main lake and incorporates green spaces, using sustainable materials and technologies to minimise environmental impact and promote energy efficiency. This approach aims to create a unique visitor experience and establish the building as a model of eco-friendly architecture.

The Merchants

Elia Orme, University of Derby

The Merchants project aims to regenerate the existing North Riverside brownfield site currently occupied by offices and car parking facilities. Seeking to provide luxury riverside redevelopment, the scheme intends to revitalise the area and reconnect the site to the City Centre. Part of a wider scheme to address the Derby City Masterplan 2030 and the Our City, Our River flood defence scheme, the design is based upon two primary focuses; community and sustainability.

The entire building, including commercial facilities, is to be constructed to exceed Passivhaus requirements, with a highly efficient thermal envelope and low u-values reducing the requirement for artificial measures for heating and cooling, providing a small-scale district heating network that is primarily self-sufficient. Reducing these measures reduces the energy consumption of the building, reduces operational costs, and increases the overall building's sustainability credentials.

Sheffield City Arena

Luke Wells, Sheffield Hallam University

Sheffield Hallam University launched the Sheffield City Arena Project with the goal of enhancing the city's ability to host large-scale entertainment, sports, and conference events, positioning Sheffield as a vibrant hub for both national and international events. In addition to constructing a versatile venue with a flexible layout, the initiative also focused on revitalising the surrounding area, aiming to make it more attractive for future investment and development. The client, Sheffield City Council, had a few key objectives for the project: using materials and elements with low embodied energy, incorporating a low-energy philosophy, and ensuring an adaptable design.

The venue was designed with functionality and inclusivity at its core, featuring a 3,500-capacity auditorium, a large, open floor with an end-stage configuration, 2,000 square meters of exhibition space, breakout spaces, food and drink outlets, VIP areas, and an exterior design that would create a landmark building within the city.

STUDENT AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY
| PROJECT

Meet the Judges

Chair:
Paul Laycock MCIAT

As a Chartered Architectural Technologist and Chartered Builder, Paul specialises in excellence in technical design of all types and sizes of buildings with a special interest in sustainable solutions, healthy indoor environments and successful buildings for all users at all stages of a building life cycle.

His involvement with CIAT has spanned many years and many tasks and roles, Previous Vice-President Education, Member Panel Moderator, Professional Interview Assessor and Accreditation Panel Chair amongst those.

As an academic, Paul's main role is in inspiring and shaping the future professionals that will be the next generation of the built environment sector.

Christopher Day FCIAT

Christopher is a Chartered Architectural Technologist with over 16 years of professional experience spanning complex design refurbishments in Central London, UK and most recently leading a one-billion dollar mega build project in the DIFC, Dubai, UAE, designed by Foster and Partners.

For Christopher, each project is a puzzle that requires time to process and logical thinking to be completed successfully. This focused commitment and competence towards each project has given him scrupulous ability to simultaneously manage design development, technical coordination, risk mitigation, BIM delivery and programme tracking.

Reputable for leaving no stone unturned when leading successful design and construction packages, he is also a firm advocate for embedding lessons learned into company standards and aims to raise the industry standards overall. Christopher's future-thinking has seen him provide invaluable mentorship to developing Architectural professionals, where they themselves have climbed the ranks under his guidance and work ethic.

Róisín Ní Chatháin FCIAT

As a Partner at architecture and planning practice BPTW, Róisín plays a leading role in the delivery of large-scale residential, mixed-use and regeneration projects. Her ability to manage multiple pre- and post-planning stage projects, successfully lead design and consultant teams, and her strong understanding of the technical aspects of projects has led Róisín to develop excellent working relationships with clients, contractors and consultants.

A Fellow Member of CIAT, in 2020 Róisín's exceptional talent and architectural ability coupled with her dedication to the profession and endless support for her fellow Architectural Technologist was recognised when she won the Chartered Architectural Technologist of the Year at the AT Awards. In 2021, she was also awarded the Alumni of the Year award from Edinburgh Napier University for her dedication to the profession, and in recognition of her efforts to further the careers of the next generation of Architectural Technology professionals through a number of mentoring schemes.

Dr Poorang Piroozfar FCIAT

Dr Poorang is the Subject Lead for the Built Environment and experienced principal lecturer (associate professor) in Architectural Technology at the School of Environment and Technology, University of Brighton. He has a demonstrated working history in the higher education industry on three continents. Dr Poorang is highly skilled in BIM, sustainable design, sustainable development, architectural design and urban planning. He is a strong professional with an MArch focused on urban regeneration and mixed-use/multi-function design and a Doctor of Philosophy (PhD) focused on mass customisation and personalisation in architecture, with a proven track record of research in design, architecture, the built environment and construction.

Usman Yaqub FCIAT

Usman is a Chartered Architectural Technologist and Fellow of the Institute. Since 2007, he has worked in professional practice going on to establish Studio Yaqub in 2014, which is an award-winning CIAT Chartered Practice.

Usman has worked in all sectors and specialises in working on challenging sites whether they be residential or commercial. In addition, Usman is an Associate Lecturer at the University of West England (UWE) having originally studied there and now involved with a range of architectural programmes, particularly Architectural Technology. He has also been actively involved in the Institute at a local level since 2018 and is currently Regional Chair and CPD Officer for the Wessex Region.

In 2021, Usman received the Institute's prestigious Gold Award, as recognition for his significant contribution to the Wessex Region and Institute with his implementation of a newly reinvigorated CPD series which has significantly impacted engagement within the Wessex Region and on both a national and global scale.

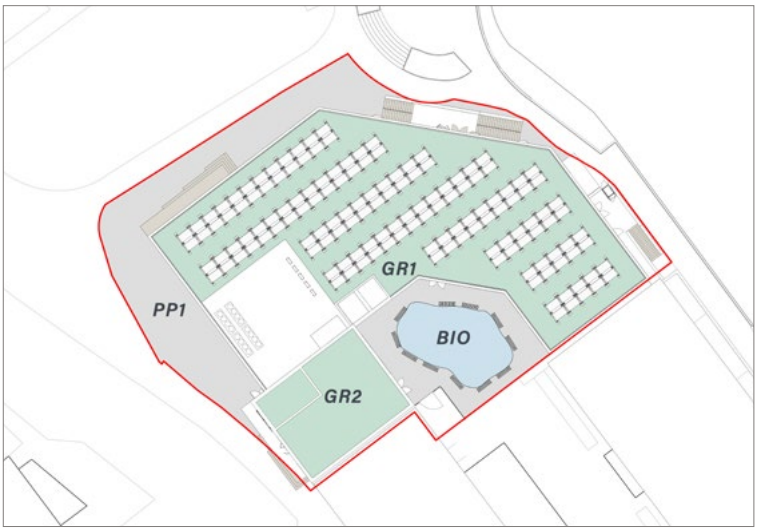
Commended 2024

STUDENT AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY | REPORT

Harnessing Sustainable Urban Drainage Systems (SuDS) for Surface Water Management

Words by Billy Cripps, Nottingham Trent University

Urbanisation over the last century has significantly altered natural landscapes, leading to a decrease in permeable surfaces and an increase in surface water runoff. This, in turn, raises the risk of urban flooding, which has become a prominent challenge in many areas. In the UK alone, flooding causes between £500 million and £1 billion in damages annually, a figure that is projected to rise with the added pressures of climate change. Sustainable Urban Drainage Systems (SuDS) offer a solution to this problem, managing surface water runoff by mimicking natural drainage processes.



This Report explores the potential of SuDS to minimise surface water runoff on the author's Major Study Project (MSP) site, located near the River Derwent, which faces recurring risks of pluvial flooding. The study evaluates different SuDS configurations using both qualitative and quantitative research methods to determine the most effective solution for managing surface water on the site. The use of Architectural Technology was integral to this research, particularly in the design and modelling of SuDS systems.

Methodology

A mixed-methods approach was employed, integrating qualitative and quantitative data collection to provide a comprehensive evaluation of the selected SuDS configurations. The study was divided into three phases:

Phase 1: Critical Literature Review – This phase involved reviewing 13 journal articles published within the last 15 years to ensure the research was current. The review focused on two key themes: comparing five types of SuDS based on their water retention and pollution reduction values, and identifying the most suitable algorithm for calculating the QBAR (Mean Annual Flood) for the MSP site. From this review, bioretention cells, green roofs, and permeable paving were selected for further testing due to their high water retention and pollution reduction capabilities.

Phase 2: Site-Specific Data Analysis – The UK SuDS Greenfield Runoff Rate Estimation tool was used to gather hydrological data specific to the MSP site. The IH124 algorithm was selected to calculate the QBAR, which provided the baseline runoff value used for comparison in the simulations.

Phase 3: Storm Water Management Model (SWMM) – In this phase, the SWMM software was used to simulate storm events and assess the performance of each SuDS configuration. Rainfall data from historic weather reports was used to simulate a 1 in 100-year storm event, and various combinations of SuDS were tested to determine their effectiveness in reducing surface water runoff.

Application of Architectural Technology
The integration of Architectural Technology was crucial in both the design and evaluation of each SuDS strategy. The Building Information Modeling (BIM) software, Revit, was used to model each SuDS configuration, allowing for detailed design and visualization of the systems before they were inputted into SWMM for simulation. This ensured that the SuDS systems were tailored to the specific constraints of the MSP site, maximising their effectiveness in reducing surface water runoff.

The use of SWMM allowed for a comprehensive analysis of how each SuDS system performed under simulated storm conditions.

SuDS tested

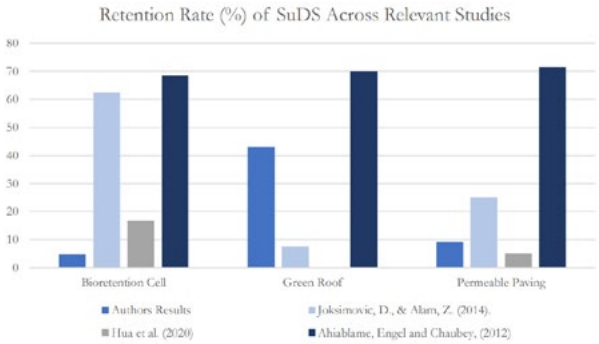
Green roofs
The study tested two green roofs, both modelled in Revit before being inputted into SWMM. The Bauder Turfed Intensive Green Roof, selected for its high water retention capabilities and lightweight structure, was modelled with a 100mm substrate layer and a 50mm water retention and drainage layer. Simulation results showed that the first green roof (GR1) achieved the highest individual retention rate, due to its extensive coverage on the site.

Bioretention cells
A Silva Cell system was chosen for the MSP site, with a design that incorporated 450mm of soil and 300mm of aggregate storage. The modular design of the Silva Cell made it ideal for urban sites where space is limited. The results showed that bioretention cells achieved the highest retention rate per square metre, making them the most effective SuDS solution in space-constrained urban areas.

Permeable paving
Permeable paving was also modelled and tested. While it had a lower individual retention rate compared to green roofs and bioretention cells, it played a vital role when integrated with other SuDS systems.

Results and analysis
The simulation results demonstrated that combining all three SuDS configurations—green roofs, bioretention cells, and permeable paving—achieved a retention rate of 81% during a 1 in 100-year storm. This confirmed the effectiveness of using a SuDS management train approach, where multiple SuDS systems are layered to enhance water retention and pollutant filtration. The results support the conclusion that using a combination of SuDS is more effective than relying on individual systems, disproving the report's initial hypothesis.

The bioretention cells were found to be the most effective individual SuDS per square metre, aligning with findings from other studies, such as Hua et al. (2020) and Joksimovic and Alam (2014). These studies similarly identified bioretention cells as being particularly effective in urban environments with limited space. In contrast, green roofs exhibited high retention rates due to their larger coverage, but required more space to achieve these results.



When compared with other research, some discrepancies were noted. For example, Joksimovic and Alam (2014) found that permeable paving had a higher retention rate than green roofs, a finding that differs from the results of this study. These variations highlight the importance of conducting site-specific simulations, as local conditions such as climate and soil type can significantly impact SuDS performance.

Conclusion
The results of this study highlights the importance of using multiple SuDS systems to maximise surface water retention. A combination of green roofs, bioretention cells, and permeable paving was shown to reduce surface water runoff by up to 81%, making it a highly effective strategy for managing stormwater in urban environments. The results also support the conclusion that bioretention cells are the most efficient SuDS per square metre, particularly in space-constrained urban areas.

Although the SWMM simulations provided valuable insights into the effectiveness of these systems, they did not account for long-term maintenance. Previous research, such as Ahiablame et al. (2012), has highlighted the importance of maintaining SuDS systems to prevent clogging and ensure long-term effectiveness. Future research should focus on the long-term performance of SuDS systems, particularly in relation to maintenance costs and potential system degradation.

In summary, this study confirms that combining SuDS systems significantly improves surface water management, particularly in urban areas. The use of Architectural Technology, including BIM software and SWMM, played a crucial role in designing, modelling, and evaluating these systems, ensuring their effectiveness in reducing flood risk on the MSP site.

Judges' comments
Billy's Report explores what is a very important topic for the Architectural Technologist and one of much broader social relevance. The thorough introduction to the subject highlights the importance of this study, not just to achieve a good working solution for the case study site, but also to test how combining drainage systems can result in a solution more effective than the sum of its parts.

The Judges liked this project for its brilliant use of technology to support design decisions. Billy thoroughly researched the background to the topic and presented his knowledge in a clear and understandable way.

Judges were very complimentary about the approach to the work, his clear writing style, and his inciteful and to the point conclusions.

Billy demonstrates a deep knowledge and passion for the subject area, coupled with a strong determination to thoroughly explore the topic and draw meaningful conclusions.

The work is aspirational in its conclusions, emphasising low-tech solutions in an industry that increasingly looks to technology to solve problems. The solution resulted in an exceptional retention rate to achieve greater sustainability for the case study site. ■

Highly Commended 2024

STUDENT AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY | REPORT

Investigating Existing Computational Design Methods and Applying Them in an Irish Location's Context

Words by Gabor Villanyi, South East Technological University

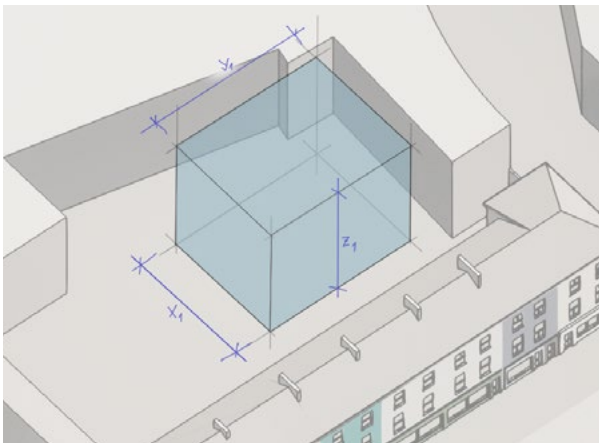
The research focuses on exploring Computational Design (CD) methods and applying them through a specific workflow example. It begins with an examination of various aspects of CD, including its role in architectural design and comparisons with related methodologies such as Generative Design (GD) and Parametric Design (PD). The study employs a structured approach to evaluate an effective CD method and workflow, including a detailed exploration of a customized Dynamo script, which serves as a template for others interested in CD.

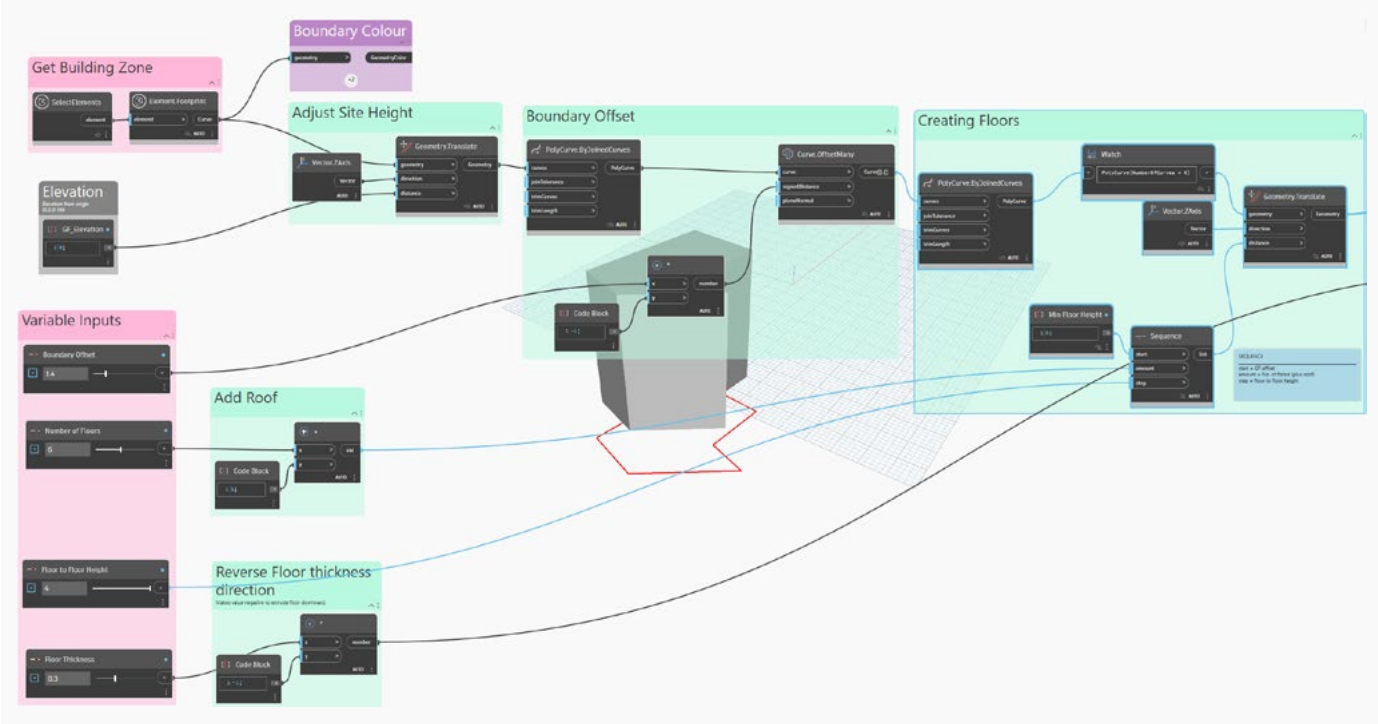
The research also investigates the integration of Dynamo with Forma, a tool for environmental design analysis, although these analyses were not deeply evaluated due to the researcher's limited expertise in this area. The study concludes with a comparative analysis, reviews of the findings, and recommendations based on the research outcomes.

The purpose of this investigation is to develop a comprehensive and strong foundational understanding of the field of CD and to enhance prospects for success in future careers. After acquiring a certain level of knowledge, the researcher collected relevant information through observation and analysis. The study focuses on the initial establishment of a tool aimed at facilitating a specific aspect of design, serving as a foundational principle underpinning the broader spectrum of design elements.

This involved breaking down the procedure of an effective Computational Design method, from the initial setup, mass generation, and breakdown of the Dynamo script to an analysis aiding the conclusion. The initial setup of the primary research involved defining the problem, outlining the main factors or brief, and determining what the "design" or the product of the research needed to achieve. This included a sketch phase to help the designer understand the site context, constraints, and parameters influencing the mass shape, followed by the design steps detailing the order of modelling and how the Dynamo script would work effectively.

Next, an overview of the evaluation phase was provided, detailing the criteria that the generated mass needed to meet, including a predetermined set of rules for finding the final design. The generation phase took what was prepared earlier and applied it in the context of Dynamo. Creating the script required a basic understanding of node-based coding and the various types of nodes within Dynamo. Example scripts were used as a basis, analysed, and modified to fit the research needs. After several attempts and troubleshooting, the script incorporated various inputs from the previous step and was implemented with Autodesk Forma. This allowed for inserting geometry into Dynamo from Forma and





generating new mass based on the parameters given in the input nodes.

First, the imported site perimeter offset by the given parameter, and the number of floors was created based on the offset boundary lines. These floors were given thickness through basic extrusion, and the floor perimeters were joined with a loft extrusion to form a façade. Once this process worked flawlessly, output nodes were completed, including an additional Forma node to send the mass back into Forma for further analysis. Other output nodes were added to show various calculations based on the areas of floors and the façade of the mass inside Dynamo.

Users can then set up the Forma workspace for different proposals for each building with varying footprints, run different simulations or analyses, and save or generate high-resolution screenshots. While this was beyond the scope of the research due to time limitations, it was noted as the next step in the analysis phase. The analysis phase evaluates all collected information, identifying patterns, trends, inconsistencies, or correlations that provide insight into the subject matter.

Judges' comments

While the focus of this work focused on an Irish context. Gabor has selected a subject relevant to both the mainstream Architectural Technologist and an important area for the broader built environment community.

Well defined aims and objectives are followed by a clear methodology, the Judges agreed that the work was thought provoking and asked us to challenge what we thought we knew about computational design methods.

This is a very practical study. The Judges complimented the work for its systematic approach and natural flow from start to finish. It was clear Gabor had been on a personal learning journey that was important to him.

Employing tools common in industry, Gabor has provided and tested an original template for others interested in the topic which includes a focus on environmental design. A remarkable and innovative piece of work with real world application.

The operational dynamo script provides for a fluidity and ease of use in the template with the results of the study showing a multitude of information that is available to designers to enhance their work, with the organised interface which adds the opportunity to analyse the simulations.

Gabor has demonstrated a brilliant writing style. The work is clear, insightful and concise in its conclusions. The Judges found the report to be a fascinating and insightful piece of work that is of significance to everyone across the design disciplines.

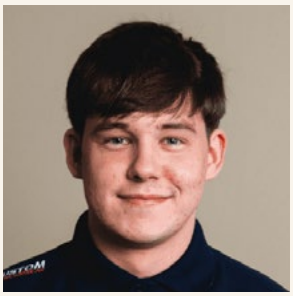
Winner 2024

STUDENT AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | REPORT

A Design Decision Support Tool to Visualise Embodied Carbon at Early Design Stage

Words by Killian Collins ACIAT, Technological University Dublin

Designers play a crucial role in promoting sustainable design. Automating the calculations of embodied carbon and visualising the impact of materials can encourage better design decisions.



As designers increasingly recognise the crucial role of the built environment in combating climate change, the use of Building Information Modelling (BIM) technology can become pivotal. BIM offers a transformative approach to design and construction processes through digital models and now data visualisation. With the urgency of addressing embodied carbon emissions in construction, this research aims to develop an automated BIM workflow that enables designers to visualise and mitigate the environmental impact of material selection within domestic construction projects in Ireland and the UK, aligning with national targets for emissions reduction by 2030. Using comprehensive data mapping and digital visualisation tools, problematic areas in material selection are identified, allowing for informed material substitutions that can significantly reduced the building's carbon footprint. The author has developed a tool and process that technical building designers can use to identify selected materials and the validated embodied carbon values of these materials.

Streamlining BIM workflows for embodied carbon assessment within digital construction designs is crucial in any BIM mandate. In January 2024, BIM requirements in Ireland will be part of the scope of works for consultants hired to plan and manage the construction of public works contracts worth more than €100 million and over a four-year period cascade down to projects under €1 million. It is noted that the UK construction industry is four years ahead of its counterpart in Ireland.

Greenhouse gas emissions in Ireland have increased by 9.2% from 1900 to 2022 with a 2 million tons of carbon dioxide equivalent (C02e) increase in the last four years. To address this concern, stringent low U-value targets have been implemented, aiming to discourage the utilisation of fossil fuels. With the increasing construction of new dwellings, there's an emphasis on achieving the mandated U-value standards. However, this emphasis on meeting U-values has resulted in the overshadowing of considerations regarding embodied carbon.

This study investigated the potential of an automated BIM workflow that enables designers to visualise and mitigate the environmental impact of material selection within domestic construction projects in Ireland. The research aimed to create a BIM workflow that automates embodied carbon calculations throughout the modelling phase, embedding data from Environmental Product Declarations (EPD) into materials within Revit and visualising the impact using the created interactive dashboard. The research suggests that visualising the materials within a project benefits decision making when identifying the problematic area. The promotion of holistic approaches is necessary with the dynamic nature of new sustainable construction methods.

The study initially carried out an in-depth literature review to identify gaps in existing BIM based methods. To test the created BIM workflow, a case study was chosen. Through comprehensive data mapping and the use of the created interactive visualisation dashboard, problematic areas in material selection were identified, allowing for informed substitutions that significantly reduced the building's carbon footprint, illustrating the potential of such methodologies in achieving sustainable construction goals. It is evident from the existing literature that steps towards BIM integration of LCA and GWP visualisation are required to support the decarbonisation of the built environment. The process for conducting this case study research will be structured into key stages as outlined below:

1. Identify benchmarks and prepare validated and un-validated data sources to be used in study.
2. Create a digital material library for Revit and map GWP data to materials through the development of a visual programming script.
3. Model case study digital building for experimentation of the study.
4. Create an interactive dashboard to visualise the whole-life global warming potential of materials within the project.

Various methods were explored to integrate GWP data into materials within Revit. The first step to creating a material library was identifying where the data was being inputted; this was achieved by creating a suite of shared parameters housed in the materials. After analysing the existing methods, a single dataset was chosen: a manually inputted Excel dataset where the author inputs both ICE and EPD/DoPC data structured in the template. It allows for materials to be created and mapped with GWP data instantly, once instead of multiple times per EPD/DoPC, as demonstrated by Dempsey & Mathews (2023), the material name is identified by the user, and density and all stages of GWP are inputted. A dynamo script was built to input materials into the dataset while mapping materials to the shared parameters housed within the material parameters. When the script is played, the materials outlined in the dataset are created with their associated GWP values. The digital model is then built using the imported materials, the materials automatically populating a pre-built material take-off schedule. This then allows for automatic calculations of GWP of the building. The schedule is subsequently employed to compute a cumulative total.

As projects progress, the schedule will update automatically. In the preliminary stages of a design where specific materials are not known, the ICE database materials are generic and not manufacturer products. It should be noted that this can cause inaccurate calculations with unvalidated data.

As researched, the main problem with calculating the GWP of a design is identifying where the problematic area is. A visualisation dashboard was created in power BI. When the file is loaded, a series of pre-built data visuals in Power BI will automatically populate, including an interactive representation of the BIM model with associated GWP data within the project. The tool has an interactive dashboard which identifies the building's overall kgC02e, its comparison per m2 to the RIAI 2030 targets, and individual materials kgC02e. The tool can create multiple versions for comparison, in effect 'optioneering' the material selection.

To test this workflow further, a focus group was approached. Built environment professionals tested the workflow on real world projects to gauge its practicality and to ultimately find out whether it promoted decision making in material selection.

The analysis of the focus group showed a number of key findings that the workflow played within the built environment. It was shown that 60% of participants made better material decisions due to visualising the impact.

Judges' comments

The Judges were unanimous in agreeing that Killian's report was both an engaging read and addressed a subject that is a real issue for all designers and an important topic for the Architectural Technologist and the broader built environment.

With bang up to date references and a clear method, this study addresses early design embodied carbon in a meaningful way. The Judges were impressed with the clarity of the literature review and the practical approach.

This well considered and executed piece of work was imaginative and highly effective in highlighting the importance of visualisation tools in addressing embodied carbon in the early design stages. With its mix of text, diagrams and graphs combining to make it an effectively written and informative piece of work.

The Judges all commented that the work was innovative in its approach. They also recognised the considerable effort that had gone into the research. They praised the work for its systematic nature and seemless progression, from the introduction, highlighting the importance of the topic, through to the clear analysis and insightful conclusions.

This is an outstanding contribution to the subject. Killian has an excellent writing style; the work was a pleasure to read, and he should be proud of his contribution to the subject and in providing us this exemplar.

Finalists

STUDENT AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | REPORT

Is Artificial Intelligence Shaping the Future of Architectural Modelling?

Amelia Rose Bambra,
Nottingham Trent University

This Report explores the transformative impact of artificial intelligence on architectural modelling, particularly in the context of free-form geometry. As architecture increasingly integrates digital processes, AI and Building Information Modelling (BIM) are reshaping the industry by enhancing design efficiency and collaboration. The research seeks to evaluate how AI can address the limitations of traditional architectural modelling tools, particularly in the early stages of conceptual design. The investigation revolves around the author's University final year 'Major Study Project' (MSP), focusing on the structural column of a bridge as a case study to compare AI-driven and conventional BIM tools, specifically Revit, in terms of accuracy and efficiency.

The research revealed several important insights into the potential and limitations of AI in architectural modelling.

1. AI's strength in early-stage design
2. Accuracy and precision
3. AI vs. BIM in free-form modelling

The Nexus Between Indoor Air Quality and Productivity

Muhammad Daanyaal,
Birmingham City University

The main focus of this Report was to identify if working in an indoor environment with poor indoor air quality has an impact on a person's productivity in a professional environment. The introduction followed the structure of describing what indoor air pollution is and some possible causes of it. Followed by some statistics about air pollution and some possible symptoms of sick building syndrome which can be caused by poor indoor air pollution and the final part of the introduction consisted of outlining the main focus and goals of the paper. In the methodology, he outlined the fact that a mixed positivist and constructivist epistemological lens was used for this research paper in addition to the using a quantitative approach to gathering primary data in the form of an online questionnaire. The final section of this Report was the conclusion which summarised findings including recommendations to take into account when designing and developing a supportive working environment.

How Building Information Modelling (BIM) can be Implemented in Demolition Decision making – Case Study on the Shell Laboratory Building

Tehillah Sihlabela,
Robert Gordon University

The objective of this Report was to explore the Environmental Impact Assessment (EIA) report that was used by Aberdeen Council to validate the demolition of the Tullos former Shell Building. The study scrutinises the Council's decision-making process in supporting their case for the demolition and compares it with other local councils' decision-making processes. The paper advocates the use of Building Information Modelling (BIM) technologies in assessing buildings and obtaining a numerical understanding of the environmental impact of demolition, particularly in today's changing world. To bolster this argument, the research paper conducts an in-depth case study analysis of a building that was demolished in the Tullos complex.

STUDENT AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY
| REPORT

Meet the Judges

Chair:
Paul Laycock MCIAT

As a Chartered Architectural Technologist and Chartered Builder, Paul specialises in excellence in technical design of all types and sizes of buildings with a special interest in sustainable solutions, healthy indoor environments and successful buildings for all users at all stages of a building life cycle.

His involvement with CIAT has spanned many years and many tasks and roles. Previous Vice-President Education, Member Panel Moderator, Professional Interview Assessor and Accreditation Panel Chair amongst those.

As an academic, Paul's main role is in inspiring and shaping the future professionals that will be the next generation of the built environment sector.

Dr Suha Jaradat FCIAT

Dr Suha Jaradat is Associate Professor at the School of Engineering and the Built Environment and Programme Leader for Architectural Technology at Edinburgh Napier University. She leads the strategic development and delivery of a suite of postgraduate, undergraduate and graduate apprenticeship programmes in a wide range of built environment disciplines, including Architectural Technology.

Dr Suha is a Chartered Architectural Technologist and Fellow Member of CIAT. She completed her PhD at the Design Innovation Research Centre at the University of Reading, which investigated the use of Building Information Modelling (BIM) in interdisciplinary practices in the UK and USA.

She is an Advisory Group Member for QAA Subject Benchmark Statement for Architectural Technology and holds External Examiner positions at national and international institutions to support the development of programmes in Architectural Engineering, Building Technology and related areas and examine a range of academic perspective in Architectural Technology and Design.

Dr Jonathan Scott FCIAT

Dr Jonathan joined Robert Gordon University in 1992, completing an HND in Architectural Technology. He went on to complete a first class honours degree in the same subject, graduating in 1998. Except for a short stint in industry, Jonathan has worked in research and teaching for The Robert Gordon University on a variety of projects, developing his interests in the areas of environmental design, energy monitoring, life cycle analysis, social and occupancy evaluation. In addition, Jonathan is also interested, in a research and educational aspect, in CAD, surveying technologies and historic conservation.

Since 2000 Jonathan has undertaken a PhD (an EPSRC funded studentship), the title of which is "Optimising The Relationship Between Passive Solar Design Of New Housing And The Economics Of Construction and Land Value", in the field of environmental design, creating a decision making tool for the selection of detached homes. He completed successfully in 2004, and he has since been employed as a Research Fellow at The Robert Gordon University.

Ann Vanner FCIAT

Ann is a Chartered Architectural Technologist and Fellow Member of CIAT, architect, an educator, a practical researcher and academic. She brings an uncoventional and unwavering passion for the built environment sector and detailed construction knowledge, as well as project management and problem-solving abilities. Practical creativity is her starting point and approach. This fosters the idea of learning through doing and inspirational pragmatism. She is passionate about the importance of design detailing – believing that for a building to function well, so must its details.

She was a senior lecturer and teaches on the Architectural Technology and architecture programme at undergraduate level and at Masters level on the MSc in Conservation and Adaption at University of Central Lancashire. Ann is now back in practice.

In addition to her architecture and research work, she is involved with a not-for-profit organisation, ACT for Housing, which aims to work with key anchor organisations in Lancashire to develop sustainable housing for local community groups.

Ann's involvement with CIAT includes the MCIAT Professional Assessment as a Panel Moderator and as a Committee Member for the North West Region in her role as Regional Educational Officer for universities.

Commended 2024

AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | SMALL TO MEDIUM

Apes Hill Golf Performance Centre, Barbados

Words by ARGO Development Studio

ARGO

Our design approach for the new buildings at Apes Hill delivers a Pavilion style of architecture that is inviting, light and airy, positioned to maximise shade and to control the trade winds as they move across the site.

ARGO made sure to capture views of the landscape and history of the land through the colonnade and open façade. Architecture and technology combine to create expansive overhanging canopies providing shelter and shade to occupants.

A passive ventilation strategy is employed throughout, using floor-to-ceiling louvers that provide a contrast to the calm texture of the stone façade. These contemporary louvered walls ground the architecture and reference a traditional Barbadian vernacular.

The rich heritage and culture of Barbados is captured through the work of many talented local artisans, commissioned to deliver the sculpture and art which adorns the landscape and interiors throughout. ARGO have created architecture with a sense of place that is functional and subservient, minimalist and timeless, and worthy of the ambition of the Apes Hill Club.

Sustainability goes beyond the environmental sphere and considers the quality of life of the guests through its beneficial use of natural light, optimised solar radiation, increased passive ventilation, and more. ARGO's Climate Intelligence Unit (CIU) has developed a unique and innovative concept, which combines vernacular architecture and today's technology to harmonise passive and active strategies together.

The cutting-edge Golf Performance Centre is the only one of its kind in the Caribbean. Golf is a confusing game at the best of times, but with this state-of-the-art facility, it can make life on the course so much simpler. This setup allows guests to learn the game just as a professional would, with video analysis, power plate mats, and an interactive putting studio. The driving range and fun golf games provide a fantastic opportunity for beginners to learn and for seasoned golfers to enhance their skills.

ARGO's digital construction and CIU teams developed the model for a system-build approach and shared it with our construction manufacturer partner in Europe. They used this model to produce the building components,

then loaded them into containers and shipped them to the Caribbean for speedy assembly.

Our Building Information Modeling (BIM) process assisted the coordination of the system-build approach by significantly shortening the design and construction turnaround time and reducing waste. This approach minimises on-site disruptions and reduces the manpower required on site by fully embracing off-site construction and reducing concrete content. The hurricane-resistant structures and façade systems are designed to withstand Hurricane Category 5.

BIM allows ARGO to design, cost, and construct more intelligent, resilient, and climate-positive buildings in a 3D virtual environment, achieving savings of up to 20% over conventional 2D delivery. Our approach involves integrating BIM technology throughout the project life cycle, facilitating collaborative design and construction processes. Through BIM, ARGO enhanced coordination among various stakeholders, local authorities and subcontractors, review clash detection, and reported to mitigate potential conflicts early in the design process. This approach ensured the delivery of high-quality and innovative hospitality spaces that exceeded expectations. It also minimised disruption to the customer, which is particularly crucial in the hospitality sector where construction timelines must be tightly managed.

The building's orientation and location were influenced by the driving range design and wind direction. ARGO wanted to deliver more fresh air to ensure safe, healthy, and comfortable conditions for guests.

ARGO used solar radiation simulations from the early design stages to ensure guest comfort, particularly during the hottest months in Barbados. ARGO analysed sun hours and adapted the canopy to reduce interior temperatures and cooling loads, with additional help from passive ventilation. We utilised various sun shading systems and passive ventilation strategies to enhance thermal comfort in both outdoor and indoor spaces.

The Golf Performance Building's design philosophy is centered on avoiding the requirement for mechanical ventilation systems. ARGO strategically placed ceiling fans throughout the Golf Performance Centre to increase air circulation with a refreshing breeze.

The standout elements are the louvre blades and cantilevered roof, which make the thermal conditions of the outdoor spaces livable and comfortable. Double-height vertical louvre blades protect indoor spaces and outdoor circulation areas from wind-driven rain but still allow for passive ventilation through the façade into the training rooms. ARGO designed the lounge area's spatial orientation to combat prevailing wind and rain. The walls have been insulated to combat heat gain to interiors. Double-hardened acrylic-polyurethane resins offer extremely high protection against all types of weather, making them especially well-suited for applications that require durability.

Cradle to Cradle Gold certification for the ceramic tiles on the façade contributes to sustainable building certifications, including LEED, BREEAM, DGNB, and HQE.

Leaving a space between the wall structure and the exterior and interior cladding creates ventilated façade. The main objective of this façade type is to control how much heat and air are transferred between the interior and exterior of the structure and to decrease heat gain.

A reflective membrane covers the roof; an environmentally responsible, energy-saving, waterproofing solution. The roof membrane has the highest Solar Reflectance Index (SRI) listed in the Cool Roofs Rating Council (CRRC) with 115. While a traditional black roof in summertime can reach 80-85°C, with the reflective roof membrane, temperatures will not pass the estimated 40-45°C.

In Apes Hill Golf Performance Centre, photovoltaic (PV) panels at the roof level support all the energy consumption of the building, producing more energy than what the building consumes, and selling the energy produced to the national grid. To be utilised in the building, water is harvested, stored and reused.

ARGO's key focus was to bring the most enjoyable golfing experience to Apes Hill Golf Resort by constructing an environmentally conscious building and reducing its carbon footprint. We partner with our clients to protect our planet by accelerating the transition to a net-zero world and producing more sustainable, resilient, and cost-effective buildings.

Value of contract: £1.95 million
Main supplier: Van Sluisveld Steel Projects B.V.
Main contractor: Panoramic Builders Inc.
Commissioner and client: Apes Hill Design & Build Inc.

Judges' comments
ARGO sensitively designed the centre into its surroundings, with embedded technology both in the construction and operational features making it a state-of-the-art training facility. It is a brilliant example of how the BIM process assisted the coordination of the system-build approach by significantly shortening the design and construction turnaround time and reducing waste. The Pavilion-style, energy-positive building enhances natural ventilation and comfort with extensive use of carefully selected systems to improve thermal comfort and build longevity. ■

Highly Commended 2024

AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | SMALL TO MEDIUM

Bungalow Retrofit by Dr Barry McCarron

Words by Barry McCarron

KORE RETROFIT

The Bungalow Retrofit project, located in Monaghan, Republic of Ireland, represents a pioneering effort in the field of Architectural Technology. Spearheaded by Dr Barry McCarron – an experienced professional with nearly two decades of experience in the construction, energy, and education sectors – this project exemplifies how a traditional Irish bungalow can be transformed into a model of sustainability, functionality, and inclusivity.

Completed in April 2023 with a budget of €360,000, the retrofit was not only a personal milestone for Dr McCarron, but also a testament to his commitment to addressing the climate crisis through innovative architectural practices.

The significance of this project is rooted in its broader implications for everyday homeowners across Ireland. In 2019, the Irish government, in tandem with the UK, declared a climate and biodiversity emergency, recognizing the built environment's substantial contribution to global emissions – 39% overall, with 11% stemming from embodied carbon. In response, Ireland's national retrofit plan set an ambitious target of upgrading 500,000 homes to a B2 energy rating by 2030, representing a monumental €8 billion investment.

The Irish bungalow, a staple of rural housing since the 1970s, is a key focus of this plan. Approximately 300,000 bungalows (15% of all homes in Ireland), dot the countryside. These homes were designed for affordability and accessibility, but they now require significant upgrades to meet modern energy efficiency and sustainability standards.

This retrofit project aimed to serve as a template for future bungalow renovations, showcasing how these homes can be adapted to meet contemporary environmental and functional demands.

The retrofit process began with a thorough assessment of the existing 1970s bungalow. The team, comprising architects, engineers, and construction professionals, developed a detailed plan that retained

25% of the original structure while maintaining 66% of the existing walls. The design preserved the bungalow's characteristic grid rhythm, with a third of the floor plan dedicated to an open layout with a vaulted ceiling, adding an element of spatial drama.

A buildability analysis was conducted to evaluate the feasibility of the retrofit in terms of construction methods, materials, and labour requirements. This included considering site access, structural constraints, and regulatory compliance. One of the key challenges was the use of pre-manufactured roof trusses, which required careful planning and coordination.

Material selection was critical to the success of the project. The team prioritised materials that were durable, energy-efficient, cost-effective, and compatible with the existing structure. Sustainable materials were at the forefront of this selection process. The exterior walls were insulated and eco-materials such as insulated cork plaster, cellulose recycled newspaper, sheep's wool, and wood fibre insulation were used throughout the project.

The retrofit involved a variety of construction techniques, including structural reinforcement, insulation upgrades, and the integration of energy-efficient windows and doors. Notably, the windows were installed against the exterior face of the existing walls, embedding them within the insulation layer to minimise thermal bridging. Aerated concrete thermal blocks were also used to address thermal bridging, further enhancing the building's energy performance.

Quality control was maintained throughout the construction process to ensure that workmanship met the highest standards. The project achieved an airtightness test result of 0.53 air changes per hour at 50 Pa, meeting the stringent standards required for Passive House certification.

Designing a home with functionality and inclusivity at its core was a central goal of this project. The single-story layout of the bungalow inherently promotes accessibility, with 75% of the living space on the ground floor. This design makes the home easily navigable for individuals with mobility issues, elderly residents, and young children.

The team incorporated universal design principles to create a space usable by people of all ages, sizes, and abilities. Features such as wider doorways, lever-style door handles, zero-step entries, and level-access showers were integrated into the design, making it a welcoming and inclusive space.

The open floor plan maximizes space utilisation and facilitates seamless movement between different areas. Additionally, the home includes adaptable spaces that can be customised to meet the changing needs of the occupants, ensuring long-term functionality.

Innovation and sustainability are at the heart of this Passivhaus project. The retrofit transformed a typical 1969 Irish bungalow with a D2 energy rating into a model of sustainability, achieving an A1 rating. This was accomplished through a combination of innovative insulation materials, passive solar design principles, and the integration of renewable energy sources.

The project features a highly insulated building envelope, passive solar design principles, and has renewable energy integrated throughout through use of a monobloc air source system and solar PV system.

The performance and robustness of the retrofit were key considerations throughout the project. The Passivhaus standards ensured that the building would achieve exceptional energy efficiency, comfort, and durability. First-year performance data confirmed that the home maintained consistent indoor temperatures and air quality, with CO2 levels and relative humidity kept within optimal ranges.

Durability was ensured through using high-quality materials and construction techniques that protect the building from moisture intrusion, mould growth, and degradation. The project also included provisions for long-term performance monitoring, with systems in place to track energy consumption, indoor air quality, and thermal comfort over time.

The Bungalow Retrofit project in Monaghan is a prime example of how traditional homes can be adapted to meet modern standards of sustainability, functionality, and inclusivity. Through careful planning, innovative design, and the use of advanced materials and technologies, Dr Barry McCarron and his team have created a home that not only serves as a personal milestone but also as a template for future retrofits across Ireland.

This bungalow retrofit exemplifies the potential of Architectural Technology to address the pressing challenges of climate change, energy efficiency, and sustainable living.

Client: Barry & Aisling McCarron
Architect/engineer: Wayne Funston, Funston Howe Architecture
Contractor: Owen Treanor Construction
Completion date: April 2023
Budget: €360,000 / €1,925 per m2

Judges' comments
This is a fantastic example of excellence in Architectural Technology, demonstrating how existing homes in the UK and Ireland can be retrofitted to assist in tackling health and wellbeing of the occupants, as well as being part of the climate crisis solution. We were very impressed with the extensive research undertaken into the review of the existing property and its poor performance, the implementation and approach to the passive house design, and the follow up and ongoing post-occupancy reviews. Busting the myth that passive house is expensive and geared more towards new build, this retrofit is an exemplar of what can be achieved. The owner occupier, Passive House designer, is practicing what he preaches, which is to be highly commended within our industry. ■

Winner 2024

AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | SMALL TO MEDIUM

Hope Rise

Words by ZED PODS

ZED PODS is the UK-leading modular housing company with a big mission: to address social inequality in housing and contribute towards reducing the impacts of climate change in the construction sector. We do this by providing innovative zero-carbon modular housing solutions on constrained brownfield sites, including derelict garage sites, carparks, infills and flood zones.

Hope Rise is an environmentally and socially focused development that has provided much-needed council housing in St George for young adults in need of affordable accommodation and those at risk of housing crisis. Completed in December 2020, in January 2021 residents moved into what are the first offsite Modern Methods of Construction (MMC) homes of their kind completed in the UK. This ground-breaking net zero-carbon development of eleven residential homes, delivered through a unique collaboration and partnership between the Bristol City Council, Bristol Housing Festival, and YMCA, is an example of innovative sustainable development above an existing public car park.

Creative land use is the central feature of our modular housing solutions. In this project, the design features a steel platform constructed above an operational council-owned car park. The project also includes enhancements to the car park layout and the addition of associated works, such as EV charging facilities, all while retaining the full complement of public parking spaces. The scheme was part of the Transforming UK Construction programme, funded by Innovate UK, which aimed to understand the challenges and risks of “going first” for innovative projects using MMC. Traditional build methods would not work on this scheme.

The completed modules were installed over a weekend, resulting in minimal disruption to the local community and traffic. The speed of construction has led to reduced disruption, noise, pollution, and carbon footprint. As a result, Hope Rise was the first scheme

to be completed and handed over to Bristol City Council, among eight other demonstration projects in Bristol. It was UK's first 100% affordable, zero-carbon-in-operation scheme built above a steel podium. This project has fundamentally changed how local authorities approach land-use in the fight to overcome the social housing crisis in the UK.

Hope Rise prioritises the health and well-being of its occupants through low-carbon design, sustainable practices, and community-oriented approaches. All homes are open floor plans and dual aspect, with large triple-glazed windows maximising natural daylight and airflow to create bright and airy homes. Residents enjoy 5sqm+ outdoor private balconies, which opens out to a grand view, encouraging outdoor living and recreation. Each home is equipped with built-in storage space, complemented by a secure cycle store located in communal area.

Sustainability and Climate Change Abatement was at the heart of the scheme design and our operations. We extended this to all elements of our production for this project. We consciously selected non-toxic, low-VOC, durable materials and sourced locally where possible, minimising embodied carbon throughout the supply chain and at every stage of the building lifecycle. Sound-absorbing insulation and strategic layout create quiet and peaceful living spaces. The residents have found that once in their homes they are entirely unaware of the car park. The form of MMC construction meant that the buildings was completed more than 90% offsite. Strict zero-waste-to-landfill policy was implemented in the factory during the offsite manufacturing process of modules. All these benefits enable carbon payback within the lifetime of buildings.

The environmental performance of these modular dwellings was critical in securing planning for this innovative development. We incorporated insights from Passivhaus, LETI, and UKGBC into our energy and fabric model to deliver this innovative zero-operational-carbon scheme that encompasses both operational and embodied carbon considerations.

The homes have been designed and to be both highly energy efficient and net zero-carbon in operation, to secure residents the lowest possible running costs. Energy bills average £46per calendar month for the one-bed apartments.

Hope Rise also has roof-mounted solar panels to generate renewable electricity in the day, quiet running micro air-source heat pumps for low-energy heating, controlled ventilation that recovers usable heat from inside the building (93% heat recovery) whilst bringing in fresh air, triple glazing, LED lighting, and energy efficient appliances. The dwellings have no gas connections, eliminating impact on air quality.

Applying a fabric-first approach, the modules achieved high airtightness and, when solar panels are added onto each dwelling, they produce more energy than they consume, making them true energy positive homes.

The 105 roof-mounted photovoltaic panels (30.4 kWp) generate enough energy to cover the yearly demands of residents and provide surplus power to the national grid. Some residents are currently benefitting financially from their solar panels; this onsite electricity generation is making the whole development carbon negative in operation.

The homes are monitored for temperature, humidity, CO2 levels, and electricity usage. In 2021, we partnered with the University of West England (UWE) to conduct the "Post Occupancy" evaluation, energy monitoring, and follow-up customer satisfaction surveys. The Energy usage analysis in the report validated that 104% of annual energy usage was generated onsite by the roof solar panels, making this development net zero-carbon in operation.

As the pilot project, Hope Rise has been extraordinarily successful in unlocking subsequent development schemes. Off the back of this multi-award-winning development of 11 homes, we have now unlocked 400 more sustainable homes in the Southwest region and have a pipeline of around 1,200 homes.

"We are a city with big ambition, and delivering affordable homes is at the heart of this," Cllr Tom Renhard, Cabinet Member for Housing Delivery and Homes, Bristol City Council, said in May 2022. Hope Rise was the first of its kind in the UK, including the first ZED POD project utilising air-rights to deliver affordable housing for young people in housing need. Innovation is not easy, but essential as we seek to deliver homes fit for the future, today."

Sam Lindo, Resident of Hope Rise and a Community Builder for the scheme, said, "I was nervous about moving in so close to Christmas because of Winter. Most people I know, when they first move in, it's always cold. However, the homes are really warm and don't take long to heat up. I fell in love with ZED PODS at first read. I loved that they are energy-efficient and environmentally friendly."

Value of the contract: £1,400,000

Judges' comments

Hope Rise provides a much needed move on accommodation for young adults through use of great design and Architectural Technology. This net zero-carbon development is a creative use of land, utilising the air rights above an operational car park to create much needed new homes without displacing existing infrastructure. They are the first factory-built steel frame modular homes of their kind to be completed in the UK. Being 90% constructed within the factory, the timescales from concept to completion was within two years with an impressive onsite construction of only two days. The judges were impressed with the overall package of detailed design and construction, speed of delivery on site, sustainability credentials and post occupancy evaluation, making this the worthy winner.

Finalists

AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY
| SMALL TO MEDIUM

Hollesley House

Plaice Design Company Ltd

A full modernisation of an existing 1930s country house in Suffolk, Plaice led this complex renovation and remodelling project, which involved the complete stripping out of the existing house, including ceilings, intermediate and ground floors, and the replacement of the plumbing and mechanical and electrical systems. It was a challenge dealing with the piecemeal fashion in which the property had been extended and adapted over its ninety years, leading to a variety of unusual exterior wall constructions, which required numerous details to suit each bespoke situation.

The New Coach House

France+Associates

The New Coach House, located in Sandal, Wakefield, is a pioneering residential project designed by France+Associates. This adaptive reimaging of a traditional family home has been specifically tailored to meet the evolving needs of a young adult with cerebral palsy. The project blends cutting edge Architectural Technology with innovative design principles, ensuring accessibility, functionality, and comfort in an environment that maintains the warmth and familiarity of a family home

Y House

PiP Architects

A private dwelling on the outskirts of Guildford, on an exclusive road of high value properties with unrestricted views of the Surrey Hills. There was an original 1960s bungalow on the site with brick façades and a low-pitch roof of concrete tiles. This dwelling did not meet the space nor sustainability needs of 21st Century living and was demolished to allow for a highly sustainable contemporary home with an increased internal floor area on the existing footprint. From the road, the proposed two storey dwelling has the appearance of a bungalow as the ground floor is submerged into the slope of the land and is only visible from the south elevation.

We apologise for "Droning" on about insurance, but are you covered for use of drones?

CIAT INSURANCE SERVICES

The use of drones by Architectural Technologists is increasing. However, drones are typically excluded under traditional property and liability policies.

The use of technology impacts on most aspects of our lives, both personal and professional, and we've largely become accustomed to the rapid and constants changes and upgrades. However, whilst it can be relatively easy to adopt new technologies, the insurance market cannot always keep up with these advancements.

It may be easy to assume the use of new technology is simply part of your existing services and cover will be provided automatically. However, this is not necessarily the case as insurers can be slow to react to changes in the use of technology.

One example of this is the commercial use of Drones to carry out surveys of land or buildings, which brings with it a number of different risks and exposures. These can include injury to the operator, injury or loss/damage to third party persons/property or damage to owned/hired equipment whilst in use.

You may assume these are automatically covered, however...

Property Insurance

Cover may exclude damage to equipment directly resulting from its own failure, so whilst you may be covered should you drop the item when taking it out of the box, if the item fails and falls from the sky, you may not be covered?

Public Liability Insurance

Whilst the wordings will vary between insurers, cover will generally exclude liability arising from the use of any aircraft or other aerial device made or intended to travel through air or space.

The Solution?

To address the risks that arise from the use of Drones, specific cover is now available for Unmanned Aerial Systems (UAS) which includes:

Physical Loss or damage to UAS - including detachable/non-detachable payloads, spares and ground control station:

• Cover whilst in flight, on the ground or in transit, including theft.

Third Party Liability Cover:

• Cover for your legal liability to pay as compensatory damages for bodily injury and/or property damage to third parties.

Should you wish to discuss the above points or you are already using or anticipate using drones and wish to investigate specific coverage, please contact:

Chris Walsh
Development & Client Executive
CIAT Insurance Services
Email: cw@mflinsurance.com
Tel: 0161 237 7726

MFL INSURANCE GROUP

Commended 2024

AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | MEDIUM TO LARGE

Swiss Laundry

Words by PiP Architects

Swiss Laundry is a highly recognisable site in Cambridge; the location of a commercial family-owned launderette for over a hundred years. This project aimed to reinvigorate a part of the city's industrial heritage and protect its future by creating a desirable modern working environment.

Originally on the outskirts of Cambridge, city growth has resulted in the site now being positioned in a very built-up residential area. As commercial laundry methods changed over time, the site became unfit for purpose. Daily delivery lorries from large hotels caused heavy traffic, noise disturbance, and highway safety issues which were poorly suited to a residential area.

As a previous light-industrial yard, the site consisted of several ad hoc buildings of varying design and quality, each erected at different times over the decades. The buildings had poor energy performance and inadequate noise insulation. A variety of site usages had also contaminated the ground. Although the site had previously been identified in the local plan for residential use, contamination made this unviable.

Proposing an alternative, PiP designed a commercial development that would regenerate the site effectively and provide local employment. To minimise impact on neighbouring residential properties, the usage class was targeted as Research & Development. Additionally, a café was planned for the street frontage to help integrate the development within the community.

Keen to avoid demolishing all existing buildings, PiP identified those built prior to the 1950s which offered historic value to redevelop. These consisted of large Victorian warehouses with striking chimneys. Poorer quality tin sheds constructed later were designated to be replaced with higher quality buildings while retaining the character of the original Swiss Laundry, a fondly recognised landmark in the city.

PiP identified the important architectural features of existing buildings and integrated these into the design. This included arched openings and an exposed brick gable with a beautiful large Victorian circular window. Industrial chimneys that had collapsed were rebuilt with salvaged bricks, providing a strong visual identity, while a former loading tower was transformed into a stunning atrium with diffusing glass, creating a sense of light and space into a crisp, modern new entrance.

A challenging timescale was imposed on the project, which required construction to begin as promptly as possible. PiP proposed a design that utilised permitted

development rights to make a start before planning permission could be attained for other aspects.

This approach also required PiP to manage both design and construction stages of the project simultaneously which involved constant adaptation and response to changing circumstances on the live site. PiP were able to create Category A shells that could be fully customised once Mechanical and Electrical Consultants became involved later.

In order to make the site commercially viable for the client, the floor area needed to be significantly increased from 20,000 to 50,000 square feet. PiP achieved this by installing mezzanine floors within the warehouses and replacing demolished buildings, all within permitted development rights. Planning was then later applied for to create the final 10,000 square feet, as well as external fenestration to provide natural light for offices.

To retain the external structure of existing buildings, steel frames were inserted inside the building tied to the original brickwork to ensure it was structurally supported. Additional loading, such as mezzanine floors, were supported by the new frames rather than the historic structures.

The client established an in-house construction team for this project and PiP were closely at hand to advise and manage the build, with staff on site every week to facilitate quick problem solving as required.

Contract Value: £5M
Contractor: CamProp
Structural Engineer: CAR

Judges' comments
The Judges welcomed the reuse and refurbishment of these old laundry buildings on the outskirts of Cambridge, bringing them back into use and providing modern offices. With a strong focus on sustainability, the project transformed a historic industrial site into a modern commercial Research & Development facility, which is to be commended. ■

PiP proposed a design that utilised permitted development rights to make a start before planning permission could be attained for other aspects.

Highly Commended 2024

AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | MEDIUM TO LARGE

Caernarfon Castle

Words by Buttress

Buttress

Caernarfon Castle is a Grade I listed Scheduled Monument that is a testament to medieval architecture. Buttress was appointed by Cadw to lead a conservation project at the castle, enhancing accessibility, functionality and visitor experience. Our work at Caernarfon is not a single piece of architectural design but a collection of interventions throughout the King's Gate. This included adding lightweight contextual forms as bespoke pieces of 'furniture'.

The bespoke design approach respects the fact that King's Gate was an incomplete structure, recognising one of the outstanding universal values of the UNESCO World Heritage Site. Our designs do not 'complete' the building, but instead add another layer to its history.

The priority of the project was to make a significant portion of the castle's upper level more accessible to a wider audience. Buttress' strategy for ensuring this was grounded in collaboration. We worked closely with Cadw and stakeholders, including ICOMOS UK, Gwynedd Council, and the local community. Virtual reality technology was used to view the proposals to get a greater understanding of the spaces. In addition, QR codes were used for people to view the model in 3D from any smartphone device.

This led to the creation of new spaces within the King's Gate towers and the installation of a lift, providing access to the upper-level viewing deck and seating area. The seating, crafted by local carpenters, reflects the octagonal shape of the towers below and protrudes through the deck to acknowledge the unfinished status of the monument.

The bespoke glazed lift is a noteworthy feature of the work at Caernarfon – and the first of its kind within a UK World Heritage Site. Starting with the backdrop of a medieval tower, the modern structure needed to be both reversible and contemporary. The external glass is treated to reduce reflection, allowing uninterrupted views through the tower and out on the deck. The lift structure is supported by new steelwork within the floors, utilising existing pockets and ledges without altering the original stonework. The positioning of the lift was carefully thought out, with a balance sought between providing the most access whilst being the least impactful to the monument.

The spiral staircase within King's Gate was another focus of the project, where we created a contemporary

continuation of the partially complete stone staircase that rose partway up the Prison tower. The new stair elements were built by layering pieces of Accoya timber to form steps, cut individually and installed piece-by-piece on-site, following the contours of the castle wall.

Our work also explored the complex history of the site. Part of the interventions were the 'Hands That Built the Castle' artworks, located across King's Gate to provide visitors with a deeper understanding of the castle's history. These artworks offer a new narrative and celebrate the contribution of all those involved in the construction of the castle.

Material selection has been a crucial part of the work at Caernarfon. The new elements chosen are sympathetic to the original fabric whilst being legible as modern, with a palette of materials that sit in harmony with the limestone and granite blocks. Sustainably sourced timber will be left to patina and colour naturally over time, whilst large expanses of frameless glass allow views and vistas to be maximised, unrestricted by physical posts and framing members. Materials were locally sourced where available, such as stone and slate from nearby quarries.

Physical fixings into the building fabric have been coordinated to align with mortar joints only, with no direct fix through facing stonework. This resulted in staggered and stepped fixings to coincide with the locations of suitably sized mortar beds. A bespoke steel fixing stake was developed after vigorous prototyping, sampling and load testing. The stake provides some degree of tolerance to allow for in situ adjustments of glazed panel positions. In total, approximately 400 brackets were installed throughout the King's Gate.

During the early stages of the project, the impracticality of enveloping the exterior walls of the King's Gate to provide a wholly watertight interior solution was agreed upon. A semi-waterproof solution was developed, which involved the introduction of roofs within each of the towers. Existing wall heads remain in situ, reliant upon their sheer mass to control and mitigate water ingress,

whilst interior spaces have been designed to encourage cross-ventilation maintained through existing window openings, with underfloor heating installed across the full floor plate.

The general philosophy towards fabric repairs was to retain as much of the original fabric as possible. Before undertaking any physical repairs, the fabric was closely assessed, and stone and fabric repair techniques were agreed upon by the designers, stone masons and conservation officers.

Carved stonework, statues and projections were closely inspected using pull and touch tests to ascertain their condition. The sections of stone that had become detached over time were gently worked free and reattached in situ using stainless steel dowels and resin, whilst delaminated or heavily spalled stones were cut out and new ones indented to match the existing in size, texture and bond.

A layer of insulation has been introduced across each of the new tower roof decks as well as the installation of LEDs, linked to PIRs where practical. The result is a bold and innovative approach, yet subtle from the exterior, challenging convention whilst revealing and enhancing the universal value of this remarkable place.

The interventions at Caernarfon Castle have had a profound impact on the visitor experience and local community. For the first time, areas of King's Gate are accessible to all, giving a wider audience the chance to explore and appreciate the castle's rich history.

The project has also enhanced the castle's role as a cultural and educational resource by offering spaces that can support school trips and community events. The local economy has benefited from increased tourism, and the introduction of a café has created new commercial opportunities, further integrating the castle into the fabric of the local community.

Architect: Stephen Anderson, Buttress
Structural Engineer: Pat Ruddock, Mann Williams
Services Engineer: Nick Barton, Silcock Leedham
Main Contractor: Will Mellor, Grosvenor Construction

Judges' comments
The Judges acknowledge the high-quality technical design solutions into this existing structure of a Grade 1 Listed World Heritage Site and Scheduled Monument. The design team have been able to maintain the charm and historic significance of the castle whilst also providing usable and accessible spaces and incorporating interventions that are both reversible and non-intrusive. The minimal mechanical fixings and reusing existing historical structural bearing points to preserve the integrity of the castle displayed a strong technical understanding and approach. ■

Winner 2024

AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | MEDIUM TO LARGE

ECD Architects
ENERGY CONSCIOUS DESIGN

Thornhill Primary School

Words by ECD Architects

The project expands Thornhill Primary School from a 1-form to a 3-form entry school with a new Passivhaus Certified building and refurbishment/remodelling of the existing school building to enable both new and old to be holistically brought together. Our design separates the year groups between the two buildings, yet presents the school as a single facility through a carefully designed external landscape that forms connections between the two buildings.

Travelling within the landscape we have strategically located an amphitheatre at a key circulation node directly adjacent from the southern group room providing a unique outdoor space for learning. Internal and external teaching spaces were designed to support alternative methods of learning and offer a platform for evening/summer events for both the school and the wider community.

The new building is arranged around a central playground, overlooked by circulation spaces and a new first floor external walkway. This walkway wraps the entire two storey section of the building, providing valuable breakout space for smaller group learning, connecting teaching with the outside and the surrounding context following the teaching pedagogy of the existing facility. At the building's heart there is a double height entrance atrium and split-level library/ICT facility, adjacent to the new sports/dining hall, centralising the facilities, promoting active learning within a centralised hub.

Where possible, spaces were designed to be flexible and multifunctional, such as placing the food science rooms next to the hall, with a folding partition between them to allow the hall's size to be increased for events. Sections of the building can be closed off and operate independently. This allows the building to be operated in the evening for local community events and classes.

Crafted from Cross-Laminated Timber (CLT),

designed to achieve Passivhaus Certification and to achieve a design life of 60 years, the project's buildability and assembly was a key consideration beyond what would typically be required of a more traditional school. The key aspects in relation to this were:

1. Speed of construction: Due to a tight delivery programme, a range of Modern Methods of Construction (MMCs) were investigated, allowing for both the sub-structure and superstructure to be constructed simultaneously (one onsite and the other offsite). CLT was selected for the superstructure due to it achieving the necessary construction programme whilst still offering a high degree of flexibility for the schemes design and potential future adaptation of the building.

2. Material efficiencies: Optimisation of material usage was continually reviewed throughout the design process. Working closely with the structural engineers and the CLT sub-contractors at the early stages of the projects design, we reduced the embodied carbon by focussing on structural efficiencies.

3. Thermal continuity: To ensure the key technical detailing was incorporated into the scheme, thermal bridge calculations for all building junctions were undertaken and formed the basis for an iterative technical design process. This adjusted the construction assembly to continuously optimise the thermal performance for the junctions. These calculations were then used to inform the PHPP model to ensure the fabric performance achieved the Passivhaus requirement for a maximum heat demand of 15 kWh/m2/yr.

4. Airtightness: Achieving high levels of airtightness is a fundamental part of achieving Passivhaus Certification, which was one of the deciding factors for selecting CLT as the superstructure of the project, due to its inherent airtightness. Through our review of project case studies on airtightness strategies on buildings constructed within CLT, it was shown that Passivhaus airtightness levels had been achieved with simply taping the joints between the panels. Due to the scale and volume of Thornhill, we incorporated an airtightness membrane over the entire structure of the building, placing it on the external face of the CLT panel to limit the number of potential penetrations from the fitout works and future internal adaptions to the school.

5. Construction tolerances: Understanding the construction tolerances was key to ensuring uniformed thermal performance. The brief at inception did not include Passivhaus, however, from the outset, passive design methods were implemented. A key challenge was the masterplan requirement to site the new school along the northern boundary, requiring a fine balance between creating an active façade while reducing potential heat losses through glazing.

A centralised whole building ventilation system was required to reduce the number and length of the MVHR systems façade connections for the intake and extract. This resulted in adapting the design to accommodate a single system, significantly reducing façade connections to just two, along with duct work length reductions.

A key objective established with the client was to incorporate the principles of circular economy within the design. We aimed to implement the principles of circular economy within the design, where possible specifying materials that could be reused, repurposed or are highly recyclable.

Previously to Thornhill, we had mainly focused on reducing operational carbon and this project was one of our first projects where we focussed on specifying low embodied circular materials. The learning from these projects is that the whole life carbon and lifecycle analysis needs to be considered to find the optimum balance between carbon reduction and performance, which we now consider on all projects, illustrating the important milestone that Thornhill was to us as a practice.

Robust performance has been a fundamental consideration throughout the design process from inception to completion to in-use operational performance. The building has been designed to provide a landmark building for the wider masterplan, while optimising the form factor and providing a high-quality piece of architecture.

Value: Confidential
Structural engineer: Symmetrys Ltd
Structural engineer (sub-structure): Engenuiti
Main contractor: Ashe Group
Services engineer: MHL Consulting
Quantity surveyor: Keegans Ltd

Judges' comments
The Judges were impressed with the delivery of the Passivhaus standards through excellent technical detailing, early engagement with the specialist sub-contractors and high quality delivery of construction standards on site.

Finalist

AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY
| MEDIUM TO LARGE

Derwent Primary School

Concertus
Part of the Vertas Group

This project was one of the first on Central Bedfordshire Council's 'Schools for the Future' programme. Works included a new traditional build two-storey teaching block, extensions, and internal refurbishment works to existing school buildings.

Coordinating construction activities whilst maintaining the school's daily operations posed logistical challenges that required careful planning and communication with the end user, client, and contractor.

Dividing the project into three distinct phases allowed for a structured approach to the implementation of our logistical plan, separating construction activities from the learning environment. The initial phase focused on constructing a reception extension to provide additional pupil places urgently. This extension contained two purpose-built teaching classrooms, providing modern and well-equipped spaces tailored to support the effective teaching methodologies of the school. The design emphasised a seamless indoor-outdoor transition, encouraging a dynamic and interactive learning environment.

The second phase focused on the construction of a new teaching block. We ensured the modern teaching block echoed characteristics of the existing school buildings but emphasised the dark feature brickwork to provide the building with flair and visual depth to the façade. The windows and doors are burgundy, matching the colour and branding of the school uniform. The purpose-built school building provides students with state-of-the-art classrooms, a studio, and a SEND room.

The site comprises an area of approximately 23,350 square metres and is located opposite RAF Henlow to the west, residential properties to the south and agricultural land to the north and east. This building has been designed to echo the ordered façade of the listed RAF Henlow hangar buildings. The regimented façade with subtle brick piers to frame the building is a sympathetic nod to the listed buildings.

The refurbishment and remodelling of the existing school (the third phase) was comprehensive and included a new library extension, remodelling for a dedicated SEND office and larger general office, and the revitalisation of critical areas such as the staff room, Headteacher's office, reprographics room, and the main hall. The refurbishment aimed to breathe fresh vitality into the space, ensuring it aligns with modern functional needs whilst enhancing its overall aesthetic appeal.

High-quality education is one of the fundamental building blocks for the future, and improving education and skills is one of the Council's priorities. The Council has a statutory duty to provide school places and is committed to providing sufficient school places appropriately located, improving educational outcomes at all stages, reducing transitions between schools, delivering best value, and facilitating more SEND spaces. It is essential that this approach is coordinated, responds to housing growth, is the best use of public money, and leads to better educational outcomes for children.

The new SEND room within the teaching block provides a dedicated facility within the primary school environment. Integrating this SEND classroom as part of CBC's remit was essential to improve SEND facilities within mainstream education. A calming and inspiring space, which considers the durability of finishes and facilitates safe surroundings, allows pupils to develop independence and self-confidence.

Good practice was adopted for the building method, ensuring it achieved good air tightness, enabling it to perform above building requirements and gain an A rating for energy performance.

Our landscaping works addressed recreational needs and the Council's commitment to the environment. Strategic planting further enhanced the overall site, helping to achieve a biodiversity net gain of at least 10%.

The site was well-vegetated, but we enhanced it with new landscape features and planting, providing an educational opportunity for the school and enhanced biodiversity.

It has been a privilege to be part of the Council's vision to build schools for the future. The extension allows Derwent Primary School to raise educational standards and increase the age range by two-year groups, as well as the capacity available overall.

Our collaborative approach allowed for a seamless transition to delivering this state-of-the-art learning environment and significant improvement works to the existing school buildings. The Head Teacher is thrilled with the results.

"Derwent is truly 21st century ready, with a modern, warm and vibrant set of buildings enabling us to teach an exceptional curriculum to our pupils," said Samantha Barlow, the Executive Head. ■

Client: Central Bedfordshire Council
Project value: £6 million
Contractor: SMD Ltd

STUDENT AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY

Meet the Judges

Chair:
Justin Kelly FCIAT

Justin is a partner at BPTW, an award winning CIAT Chartered Practice which is design-led with over 125 Architectural Technologists and architects with studios in London and the Midlands.

He acts as the lead Architectural Technologist at BPTW and has been an examiner at the Architects Registration Board, Secretary at the RIBA South East London Society of Architects (SELSA) Branch and is currently a Professional Interview Assessor for CIAT.

Having previously lived and worked in Rotterdam, Justin has gained experience on various residential led developments in both Rotterdam and Amsterdam. He completed a Diploma in Sustainable Urban Design from the International Institute for the Urban Environment in Delft, the Netherlands.

Dr Gihan Badi FCIAT

The founder of GB Atelier, CIAT Chartered Practice for architectural services, with more than 20 years of experience in the built environment sector and academia in both the United Kingdom and the Middle East. As sole practitioner, Gihan has gained experience on various residential and commercial led developments in both the UK and the Republic of Ireland.

Gihan is a Fellow Member of CIAT and a Chartered Architectural Technologist. She is also a Fellow Member of Higher Education Academy with a Doctor of Philosophy degree in Planning, Housing and Human Geography.

In addition, Gihan is an Assessor for CIAT and has been a member of the Yorkshire Regional Committee for many years, and is actively involved with her professional institute at local and national levels. Gihan was previously the Regional CPD officer (2014-17) and the Regional Committee Chair (2017-19).

In 2017, Gihan was a Finalist as Best Architectural Technologist in the European Women in Construction and Engineering Awards.

Dan Clements MCIAT,
Vice-President Practice

Dan is a Chartered Architectural Technologist with many years' experience in the design and detailing of domestic and non-domestic properties. With a strong design background, Dan has built a reputation for providing creative solutions to a variety of briefs.

Dan set up CIAT Chartered Practice Aditus Architectural Services Ltd in 2015 to specialise in both private and commercial architecture. As a former CDM-c, Dan is fully qualified to act as 'principal designer' under the 2015 CDM regulations. He recently acted as principal designer on the high-profile demolition of the Central Plaza Hotel in Carlisle, working for Carlisle City Council.

Dan is the current Vice-President Practice for CIAT and sits on the Institute's Executive Board.

Hadeel Saadoon FCIAT

Hadeel is a Chartered Architectural Technologist and Fellow Member of CIAT. She works as a Building Information Manager for Coventry University Estates Digital Services team, leading the implementation of BIM and digital technologies in building maintenance, development and refurbishment projects and in the construction of new campus buildings and student accommodation projects.

Hadeel also manages the creation of the Coventry University digital campus and the retrospective modelling of existing buildings and also the establishment of the Common Data Environment for the university group.

Alongside being an ambassador for Women in Construction, Hadeel is also the Chair for BIM4Estates group, UK BIM Alliance communities lead, Regional lead for Women in BIM, and Regional Co-Chair for the West Midlands Region.

Anthony Walsh FCIAT

Throughout his career, Anthony has acquired a varied but extensive knowledge within most sectors of the construction industry and, through the diversity of the projects that he has been involved with, has attained considerable experience in a wide range of government, residential, retail, commercial, leisure, industrial, educational and health care developments. He is able to work from feasibility and inception through all the various stages of design and specification process and, utilising his excellent presentation and technical skills, is capable of working to strict budgets and timescales. Combine this with his valuable on-site job running expertise and Anthony forms an important link in any team.

Commended 2024

AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | LARGE TO MEGA

Morpeth Sports & Leisure Centre

Words by GT3 Architects

The Morpeth Sports & Leisure Centre is more than just a building; it's a vital community hub that offers a wide range of facilities designed to enhance the quality of life in Morpeth. Located at the edge of the town centre conservation area and sitting beside the River Wansbeck in Gas House Lane, the new facility acts as an exciting bookend to the existing high street.

It brings together a six-lane swimming pool complete with a spectator gallery, a learner pool, spa and fitness suites, multi-purpose studios, and a large sports hall. It also features a community services hub that includes a double-height library, a customer service centre, a café, and a soft play area with connections to a poetry garden and outdoor terraces. For those looking to further their education, the centre incorporates a brand new adult learning facility with classrooms designed for a variety of courses.

A key design element of the Leisure Centre is the attractive public street zone, which runs between the length of the building and the River Wansbeck. The 'organisational artery' of the design, this walkway boasts separate entranceways and large windows into each of the key facilities, allowing the people of Morpeth to interact with every element of the building without needing to go through an intimidating paywalled entrance.

Sustainability has been considered throughout the design and utilises an 'envelope-first' sustainability strategy, minimising energy losses from the building fabric. In addition, a mix of air and water source heat pumps, combined with photo voltaic panels minimise energy usage and maximise on-site generation.

The building's form was a response to the brief's activity zone requirements and boundary constraints. The juxtaposition between external and internal factors curated a sympathetic shape that provided inviting outdoor spaces and comfortable separation between key differing indoor activity spaces.

These are the sports hall (a naturally conditioned space with exacting acoustic and lighting requirements),

multi-function studios (with highly conditioned and acoustic requirements), a swimming pool (a warm, highly humid and metallurgically corrosive environment), and a community zone (a temperate, comfortably lit and aerated space).

This led to the idea of splitting the building's relatively slender form lengthways, offering a controlled envelope, which enclos¬es the majority of energy-intensive volumes to the north, and a fully glazed façade to the public street space, offering views towards the river.

The use of the composite panelling system as the substrate to the solid element of the envelope gave a simple and cost-effective approach. The panels were directly fixed to the main frame of the building, spanning horizontally between circa 4.5m grids.

The panels provided a robust single solution, maintaining the various thermal environments internally, whilst providing a 'blank canvas' with suitable loading capacity for the façade palette of brickwork, green walls, and timber fins, to be fixed back without any additional secondary steel support behind, minimising the embodied carbon within the frame.

Areas of façade transition occurred; whereby we placed larger timber fins in front of curtain walling as they returned around the building. This required a developed detail for a bracketry system for us to successfully install, insulate and support the run of 400x90mm timber fins, which spanned across a section of first floor curtain walling, serving the fitness suite.

This connection detail allowed the enlarged fins to appear floating in front of the glazing through only a two-point connection above and below the glazing, offering a level of obscurity to the fitness suite without completely hiding the building-life within.

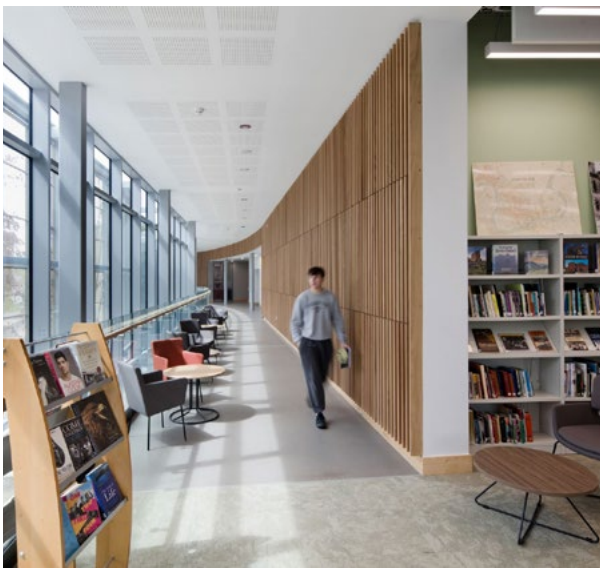
Designed to serve the entire community, Morpeth Sports & Leisure Centre encourages participation in fitness, education, and social activities. Key features that enhance the centre's inclusivity include communal changing villages with family and accessible zones, modern pool pods for easy access, and changing facilities with direct access to the pool.

The design also incorporates a double-height circulation street, treated with acoustic timber panelling and perforated plasterboard, which provides a welcoming route from the main entrance and café to the quieter library space.

The centre's impact on the community is already evident, with usage statistics showing a 197% increase in swim visits, a 266% rise in gym visits, and a 165% boost in new community members within the first six months of operation.

Given the building's location, it commands a strong vantage point of the Wansbeck River from the northern riverbank, which is diminished only in section by an established tree line. During early stages we acknowledged that to take full advantage of the southerly views towards the river, the double-height curtain walling would require treatment to manage the solar gain likely experienced on the elevation. As the project developed, we made the decision to introduce an aesthetical, yet functional, veil to the upper section of curtain walling. We calculated its percentage of perforation to ensure an optimised level of light and visual transmission, yet also limit the level of heat gain into the building.

As this elevation would be a key perspective to the wider public when travelling into Morpeth, the pattern on the veil and panel sizes needed to be carefully considered. Through extensive liaising with the cladding specialists, we were able to develop a perforation pattern which



replicates the tree foliage, varying in density to mirror the tree extent beyond, to offer an even yet equally natural 'solar defence' during the warmer months. This helped avoid the additional building cooling load and assisted in the buildings A-rated EPC achievement.

Due to the building's location and the client's concern over asset damage and loss, flooding analysis played a key role in the building's design. When reviewing flooding extent (which had historically occurred), and accounting for climate change, it was deemed from the outset that the building would be elevated 1100mm above existing ground level.

Whilst this elevation provides reasonable coverage of most flooding scenarios, the percentage increase allowed for climate change meant we needed additional design robustness internally. We also ensured enhanced operational robustness outside of flood risk by including cast concrete upstands to all 'wet' space boundaries.

Materials within the sports hall needed to be robust to withstand the effects of various sports. With this in mind, we clad with high quality wood veneer wall panels: solid up to 2400mm and perforated for 3m above and plasterboard thereafter. The panels provide a highly decorative, acoustically controlled, and impact-sturdy finish.

The Morpeth Sports & Leisure Centre is a shining example of how modern Architectural Technology can be harnessed to create a sustainable, inclusive, and functional community hub. Through thoughtful design, innovative solutions, and a commitment to sustainability, the project not only meets the needs of the Morpeth community but also sets a new standard for future developments. The centre is not just a building: it's a beacon of what can be achieved when Architectural Technology and community needs are aligned. ■

Client: Northumberland County Council
Project value: £21 Million
Contractor: Willmott Dixon

Judges' comments
The Judges recognised the high quality of the sympathetic technical design working within the site and its environment. Overcoming the challenges to address flood mitigation through elevated design and robust materials, and the effective thermal separation for efficient operation and comfort, are to be commended.

Highly Commended 2024

AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | LARGE TO MEGA

Verse

Words by Rio Architects

Our client's vision was to design a high-quality, high-rise, build-to-rent residential building that would continue the regeneration of Cardiff's city centre. This was to be delivered within a conservation area and address the needs of modern city living within the financial constraints of the client's development appraisal.

Verse represents a forward-thinking residential building that enables opportunities for its occupants to connect and create a sense of shared community to help counteract feelings of loneliness and isolation, which are increasingly associated with inner-city living.

Verse comprises 152 residential apartments, including 48 studios, 66 one-bedroom apartments and 38 two-bedroom apartments distributed through six, seven and sixteen-storey interconnecting blocks surrounding a central courtyard. Rio's design included the provision of over 4,100 square feet of shared amenity space and over 1,400 square feet of dedicated communal workspace, allowing residents to take advantage of the holistic approach to urban living that sets a new standard for inclusivity and functionality in city-centre living.

The contemporary development features a large double-height communal lounge with a games area, a private dining room with a fully equipped kitchen, a gym, co-working spaces, a reading room and a sizeable roof terrace on the fifth floor with a quiet corner to support wellbeing. To promote sustainable and active lifestyles, Verse includes a 124-space bicycle store with provision for a washing and maintenance zone and charging points for electric bikes.

Verse has a distinctive identity and aesthetic, responding to the materiality of the area without imitating existing buildings. The inclusion of deep brick reveals to the elevation facing Charles Street successfully emulates Victorian proportions and detail, continuing the rhythmic proportions and vertical expression of the adjacent terraced properties whilst providing a contemporary façade aesthetic.

The tower's panelised façade creates a complimentary language of architecture and synergy between the Verse and adjacent Bridge Street Exchange developments, combining bronze-coloured powder-coated aluminium

panels, clear glazing windows and expanded aluminium mesh panels separated by vertical fins, which help to enhance its height and provide definition and relief across the façade. The use of dark contrasting brick in the interconnecting block provides a visual backdrop with proportional and material links to the contextual Charles Street block and the taller tower block.

Verse's design takes into consideration the historical and architectural character of the conservation area. It is seen as a benefit for the local community, maintaining the area's unique identity and character. The massing of the scheme is a direct response to the context of the urban environment. As the building recedes from Charles Street, it increases in height. The increased height responds and reflects the emerging hierarchy of the city centre redevelopment, complimenting recent developments, such as Bridge Street Exchange and Tŷ Admiral, to form a cohesive family of tall buildings.

The apartments are designed with a contemporary open-plan layout, which enhances the sense of space and avoids the creation of tight and unnecessary circulation areas. Each apartment layout is zoned to create distinct living areas, offering privacy while maintaining an uncluttered, airy space.

Verse is a testament to how innovative construction techniques can transform challenging urban environments. Its construction showcases cutting-edge methods of construction, including a unitised curtain walling system and mechanically fixed brick-slip cladding, chosen to optimise build quality and efficiency.

By embracing modern methods of construction and prefabrication, the project reduced material waste and enhanced on-site efficiency. The 'just-in-time' delivery model maximised the use of the constrained city-centre site, ensuring that safety and quality standards were upheld throughout the build.

The building occupies over 90% of the site, making the selection of a unitised curtain wall system essential to avoid costly scaffolding while ensuring safety and quality. Precision manufacturing of façade elements in a controlled environment ensured on-site errors were minimised and streamlined the installation process, delivering a significant programme advantage. The pre-installation of all the unitised curtain wall bracketry onto the concrete frame prior to the curtain wall panels arriving on site, in conjunction with the improved workmanship and quality, allowed the façade to be rapidly installed, resulting in a 12-week programme advantage within a 90-week timeline.

The decision to use brick-slip cladding for the façades was driven by the desire to achieve both aesthetic goals and practical benefits. Brick slips are about 75% thinner than traditional brick, making them lighter and easier to transport and install. In addition, they allowed us to ensure consistent quality and easier installation compared to traditional brickwork.

The incorporation of deep reveals in the design required extensive structural support and coordination to form the façade geometry without losing the traditional look and feel of the design intent. In addition, the deep reveals sill profiles were sloped to avoid rainwater accumulation. We utilised what effectively is a ventilated rainscreen system with a varying cavity depth and a complex structural support system, which combines a number of steel posts and vertical and horizontal rails. Extensive design and coordination was fundamental to ensure the provision of adequate fire compartmentation, a continued thermal insulation line and waterproofing.

The development's sustainability credentials are impressive, with energy-efficient systems such as high-efficiency air source heat pumps providing hot water into apartments, MVHR heat recovery units and VRF units within communal amenity spaces to provide ventilation and heating and over 80 metres squared of photovoltaic panels, providing residents with long-term cost-saving benefits.

The use of green roofs provides bio-diversity benefits in an urban environment. These are combined with blue roofs, along with additional bio-retention planters and rain garden tree pits at ground level, forming part of a comprehensive sustainable urban drainage system (SuDS), ensuring effective stormwater management. These features, along with new public spaces and improved pedestrian routes, reinforce the project's role in revitalising Cardiff's city centre and providing economic and social benefits to the wider community. Verse's central location, proximity to key city services, and access to good pedestrian and cycling routes reduce the need for private or public transportation within the city environment.

Verse is more than just a residential development; it is a model of sustainable urban living, combining innovative design, robust construction, and a deep commitment to community and environmental wellbeing. This project highlights what can be achieved when modern construction methods are applied thoughtfully, creating spaces that meet today's needs while being adaptable for the future. ■

Development cost: £25.6 million
Architects, Lead Designers, Architectural Technologist: Rio Architects
Developer: Crossmark Developments
Main Contractor: BECT
Cost Consultants: Currie & Brown
M&E, Structural and Civil Engineer: Hydrock
Landscape Architect: EDP
Planning Consultant: Avison Young

Judges' comments
The detailed design combined precast and in-situ concrete for robust construction, utilising prefabrication techniques to reduce waste, improve efficiency and a jump formwork system to speed up project delivery time. The strong contemporary design has been achieved through solid technical solutions with a unitised curtain wall system for the taller building. This is a solid, strong, technical design solution to meet the client's brief and is Highly Commended by the Judges.

Winner 2024

AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | LARGE TO MEGA

ARCADIS

National Satellite Test Facility, Harwell Science & Innovation Campus

Words by Arcadis

In 2016, the Arcadis architectural and landscape team were commissioned to design the National Satellite Test Facility (NSTF), located on the Harwell Science and Innovation Campus.

The brief was to create a world-class cleanroom test facility, comprising six enormous chambers to replicate the extreme conditions a satellite encounters in deep space, from launch to orbit.

The Diamond Light Source, the UK's national synchrotron light source science facility, also located at Harwell Science and Innovation Campus, is so sensitive to movement that it must be isolated from vibrations from the A34 (more than a kilometer away), just to prevent heavy goods vehicles from ruining its delicate experiments. With the NSTF site just 100 metres from the accelerator, the decision was made to construct as much of the building as possible offsite.

The main structure was conceived as a hybrid of steel and cross laminated timber (CLT). The benefits were twofold; firstly, the timber frame was more carbon-friendly than traditional concrete slabs, and secondly, its lightness meant that there was a reduction in requirements for the foundation depth. This saved on concrete pour, environmental impact, and crucially removed the need

for disruptive and vibration heavy digging or piling which could have disturbed nearby experiments on campus.

Each CLT panel and piece of steel was designed and coordinated in a 3D BIM environment across the whole design team, inclusive of the specialist experimental equipment manufacturers and supply chain, to ensure that they would come to site ready to slot into place and accept the buildings complex mechanical and ventilation requirements, without the need to so much as drill a hole post-delivery.

Even the basement of the building was created via a system of offsite manufacture. Huge tunnel sections similar to those used in the development of Crossrail were driven vertically into the ground to create a preformed basement structure. The sections were delivered to site via lorry and bolted together before being waterproofed to create a mechanical pit for the building's vibration testing chamber.

Modularising the frame and floor slabs meant road movements could be minimised for the main frame, but this thought process also bled over into the design of the envelope. Heavily insulated, preformed, 240 millimetre aluminium panels with airtight gaskets span directly across the buildings primary frame members.

Whilst panellisation and offsite manufacture allowed us to minimise movement to and from the site, there were some unique deliveries that were required. Transporting the buildings thermal vacuum chamber (TVAC) to site required the remodeling of Portsmouth Docks in one of the largest single road movements in British history, and closure of the motorway to allow the sixteen-by-eight-metre, 98-tonne chamber to be delivered to Harwell.

The chamber now forms part of the actual fabric of one of the main cleanroom walls. Technically, this posed additional challenges, the TVAC itself simulates the cold of space and heat of the sun on a satellite, but these intense changes also affect the outer skin of the structure, and as a result, its interface with the building. Partition junctions were specially crafted to not only deal with the curved eight-metre radius of the chamber itself, but also to flex and move during its expansion and contraction as huge quantities of liquid nitrogen coursed through its walls.

The vibration testing chamber consists of two shakers which are individually damped with over 100-tonne concrete counterweights, seated on hydraulic springs sitting in a basement below. The noise created by these shakers is in excess of a jet plane at takeoff, and the vibrational forces are large enough to literally tear a building apart. As such the room is structurally and acoustically isolated to an extremely high degree.

The pressure cascade is an incredibly important feature of the building, and the reason this facility is one of only a few globally that is able to keep satellites 'clean' through multiple tests without the need to repack and clean down.

To create this functionality, we worked closely with RAL Space's scientists to create a whole new testing process, where satellites could be unpacked at a single-entry point at the start of their journey and then remain in a clean environment whilst they navigated the full gamut of testing, like a factory production line.

The anechoic is used to provide a pristine environment to test a satellite's communication abilities and ensure that when it is hundreds of thousands of miles from home it can still relay information back to Earth. Of course, to send such a signal, huge quantities of energy are needed. This energy in turn then must be absorbed, the anechoic chambers foam cones acting as sponges to this excess output. However, due to the power generated, they can occasionally be heated to such a point they spontaneously combust. To prevent this, the chamber had to be designed with a hypoxic oxygen depletion system.

The hypoxic system dilutes the oxygen in the air, effectively thinning it to create conditions akin to that of scaling Everest. This thinning of the air helps to quell fires from starting by starving them of oxygen. Unfortunately, scientists also require oxygen to work, hence the system having to be delicately balanced, and the room carefully detailed to be sealed to prevent suffocating those working inside.

This test also needed to prevent signals and interference getting in. Hundreds of copper reflector plates help to drown out the outside world, with each placed millimeter perfect, with the exact correct length of fitting screw to prevent an electrical bridge that would render the chamber useless. This was backed by an earth mat the size of a swimming pool that had to be concealed underground to the perimeter of the site.

Dovetailing these complex requirements was a huge technical challenge, which NSTF managed to address via smart detailing solutions and commitment from the specialist teams that were contracted to construct the building. They worked in unison to provide a facility the UK space industry can rightfully be proud of and that can evolve over the next age of space travel and exploration. ■

Overall Construction Value: £94 million
Architecture, Landscape: Arcadis
General Contractor: Mace Limited
Mechanical Engineer: Hoare Lea
Structural Engineer: Price & Myers
Town Planning: Carter Jonas
CDM Advisor: Lucion Consulting (Innov8 Safety Solutions)
Quantity Surveyor/Project Manager: Aecom

Judges' comments
This project involved the design and construction of a world-class cleanroom test facility, comprising six enormous chambers to replicate the extreme conditions a satellite will encounter in deep space, from launch to orbit. Almost every detail in the project required a comprehensive level of innovation to satisfy the unique requirements of each space; it was impressive how this project was designed and managed. The Judges were impressed by the high standards of technical detailing and almost unfathomable construction tolerances of 1.5 nanometres: the amount your fingernail has grown whilst reading out this sentence. A worthy winner of the large-to-mega category.

Finalists

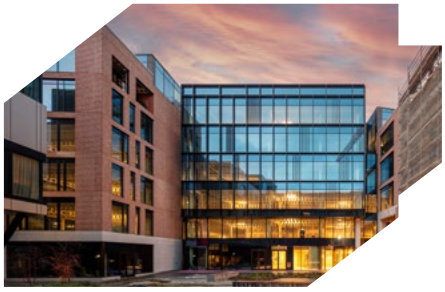
AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY
| LARGE TO MEGA

Ancoats Dispensary

Buttress

Buttress

Ancoats Dispensary is a Grade II listed building, built in 1874 to provide healthcare to the local community. Vacant and neglected since 1989. Our work at Ancoats Dispensary involved adaptive reuse of the building, transforming it for contemporary use. The transformation of the deteriorated structure into thirty-nine affordable-rent apartments responds to Manchester's urgent housing demand, whilst also preserving the Dispensary's historical legacy and character. Thermal performance, access and maintenance, and the integration of modern technology were crucial to the project.



One Le Pole Street

reddy a+u

Reddy Architecture + Urbanism

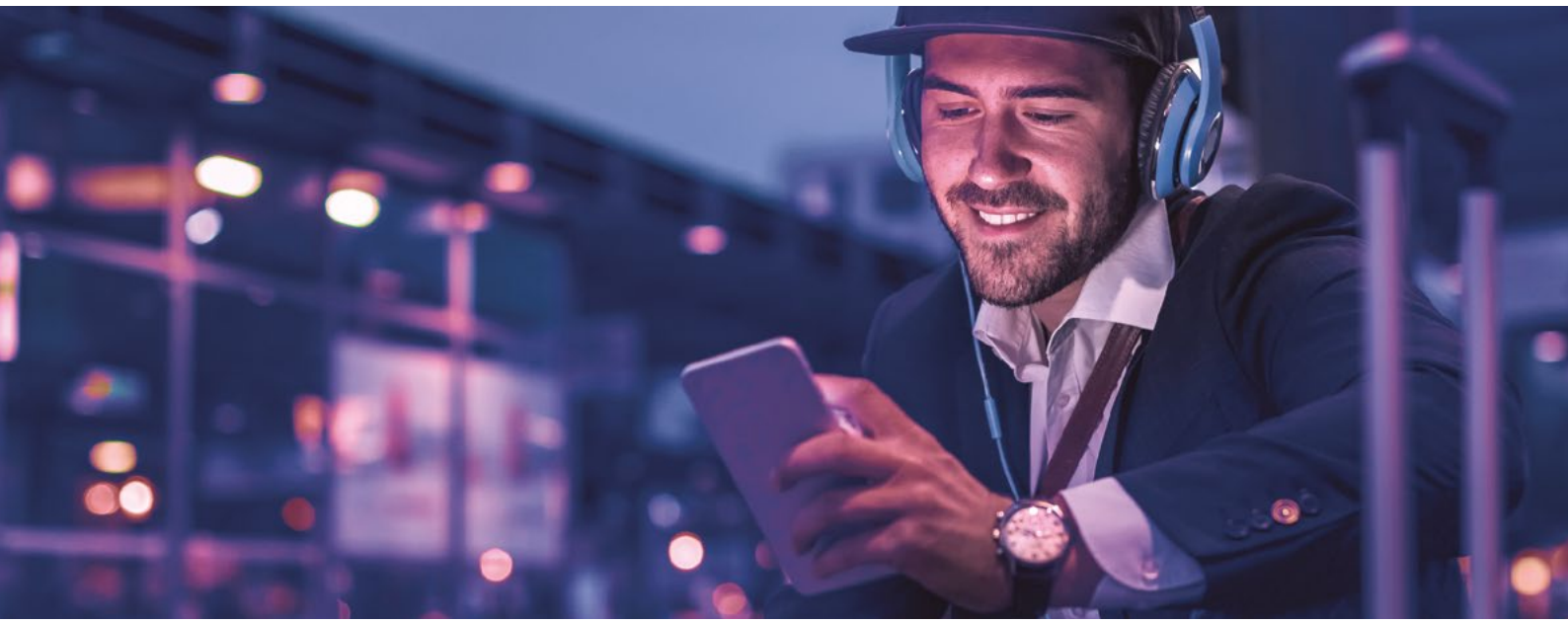
This commercial development of an area located within the southern inner city of Dublin included a two-storey convention centre, gallery, café, and office development over six floors. Given the sensitive location at the heart of Medieval Dublin, Reddy A+U conducted significant research into the archaeological site constraints, ensuring the former church and graveyard of Michael Le Pole were at the forefront of the scheme design. We developed a sensitive urban square reminiscent of graveyards and designed the building to maximise the quality of the ground floor experience for both pedestrians and occupants.

Priscilla Bacon Lodge

lsi ARCHITECTS

LSI Architects

The new Priscilla Bacon Lodge is a £12.5M new state-of-the-art hospice building in Norfolk. People who are receiving end of life care are now able to spend time in a state-of-the-art facility, where every room supports a high standard of care with beautiful views to the landscape outside. In line with the client's vision for the building to resemble a farmstead, the project comprises a collection of different scale buildings referencing the farmhouse, barn, and stable block arranged around an open yard.



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Futurebuild 2025: a must-attend event for the architecture industry

As the built environment continues its journey towards sustainability and innovation, Futurebuild is preparing to host its most impactful event yet in 2025. With the central theme of 'Impact', Futurebuild 2025 is geared towards showcasing the changes that the architecture industry and other built environment professionals can make in driving the construction sector towards a net-zero future.

From innovative products to cutting-edge materials, Futurebuild will bring together the entire supply chain to explore solutions that create sustainable, efficient, and functional buildings. As a proud sponsor of the AT Awards, Futurebuild is an ideal platform for showcasing the very best in Architectural Technology practices, products and people.

A commitment to high-impact, low-impact sustainability

The industry is increasingly tasked with finding sustainable solutions in the design and construction phases of a project. Architectural Technologists are key players in selecting materials, planning for energy efficiency, and ensuring that buildings perform well across their life cycles. Futuebuild aims to empower Technologists with the tools and knowledge to lead on these fronts.

Futurebuild is itself a prime example of a high-impact, low-impact event. From drastically reducing paper usage through smart badge software to eliminating aisle carpet waste, the event is committed to its sustainability agenda. In 2024, the Sustainable Stand Awards were introduced, rewarding exhibitors like the UK Green Building Council for creating eco-friendly exhibition spaces. For Architectural Technologists, seeing practical examples of sustainability in action is invaluable for applying similar principles to their projects.

Additionally, Futurebuild's sustainability practices extend to every aspect of the event, including sustainable food options and a significant reduction in waste streams. For the 2025 event, the use of REWIND carpet, a Cradle to Cradle Certified® Silver product, will further reduce waste in key areas.

Collaboration across the supply chain

Architectural Technologists play a pivotal role in collaborating with architects, developers, contractors, and manufacturers to ensure a project's success. Futurebuild 2025 is designed to foster these collaborative relationships by attracting professionals from across the construction industry. At Futurebuild, you will have the chance to network with experts from various fields and discover how interdisciplinary collaboration can drive better outcomes for projects.

Futurebuild's Impact campaign includes a series of podcasts featuring leaders in the built environment who are making a significant difference in sustainable design. These discussions offer valuable insights into the next generation of building standards and guidance, particularly in the realm of net-zero carbon construction.

In one podcast episode, Duncan Baker-Brown, a leading architect known for his innovative use of reclaimed materials, shares his perspective on how the architecture and design community can lead the charge toward sustainability.

Similarly, other industry leaders, including Martin Townsend and Simon Sturgis, provide insights into how technical expertise and innovative thinking can help the sector achieve its net-zero goals. Listening to these expert conversations can inspire architectural technicians to implement similar practices in their own projects.

Innovation in products and materials

Futurebuild 2025 will feature cutting-edge solutions that are designed to create buildings that are more energy-efficient, sustainable, and resilient. Visitors can discover the latest in high-performance materials, tools, and technologies that will help them deliver on the demands of modern construction.

Futurebuild is known for its commitment to innovation, and 75% of attendees typically discover new products and solutions at the event. For architectural technicians, this represents a valuable opportunity to expand knowledge and find practical tools that can be applied to current and future projects. Whether it's learning about the latest advancements in timber frame technology or exploring eco-friendly insulation materials, Futurebuild is the place to source the next generation of building solutions.

Recently, Futurebuild has published the results of an industry-wide survey to identify the barriers to specification for manufacturers. It took into account the views of the entire industry, with the aim of creating knowledge-based change, and highlighting areas where we could be working harder to achieve net zero.

Futurebuild 2025 promises to be a transformative event dedicated to impactful change and sustainable practices. It will bring together industry leaders, innovators, and stakeholders who are commited to creating a sustainable future. The event will feature a wide range of activities, including keynote speakers, panel discussions, and interactive workshops, all designed to foster collaboration and innovation.

Futurebuild 2025 is more than just an event; it is a movement towards a better, more sustainable future. Are you ready to make an impact?

Industry professionals can collaborate with Futurebuild as Impact Partners, share expertise as speakers on the Impact Stages, or showcase innovative products and solutions on the ehibition floor by submitting an enquiry on our website. ■

futurebuild

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How much does it cost to be an AT?: Salary standards and working out what you're worth

Words by Lee Smith FCIAT

Architectural industry salary standards have been gathering a large amount of interest recently, leading to a huge awakening of public understanding of the gulf between what is charged and what is actually earned.

Publicised across the media and in industry-specific podcasts such as Jon Clayton MCIAT's 'Architecture Business Club', this topic of stagnating salaries is becoming an increasingly urgent discussion. And yet, with such a huge focus on how much a Chartered Architectural Technologist earns, why are so few people asking, "How much does it cost to be a Chartered Architectural Technologist?"

To calculate the 'break even rate' for an architectural practice, one must first look at the overheads. There are no universal magic numbers here; each specific practice will have its own unique set of overheads and other costs. A sole practitioner will of course have very different overhead costs to a medium sized practice in a city centre.

Below are example figures that simply show the principle of calculating overheads:

Overhead	Per Month (£)	Per Year (£)
Salary	3,000	36,000
Equipment (laptop, furniture, signboards, surveying equipment, etc.)	100	1,200
Software licences	160	1,920
CIAT / professional fees	50	600
PI insurance	200	2,400
Mobile phone bill	50	600
Accountants fee	75	900
Vehicle use for work (inc. fuel, MOT, tax, servicing, repair, business insurance)	300	3,600
Studio broadband	50	600
Studio utilities	300	3,600
Studio office rent	900	10,800
Misc (stationary, printing, OS maps, award entry fees, etc.)	150	1,800
Total	**5,335**	**64,020**

Annual Hours
To determine the hourly break-even rate, the practice will need to determine how many chargeable hours are available in a year:

37.5 Hours a week x 48 weeks equals 1,800 Hours per year. If 60% of those hours are invoiced for, that equals 1,080 hours per year. This gives us a £59.28 per-hour 'break even rate'. (This is £79.04 per hour after 25% corporation tax.)

If we were to add a 20% profit margin, this would give the above example a chargeable rate of £94.84 per hour.

Utilisation
Wait a second... why are only 60% of hours invoiced? Well, every single worker in our industry will have a unique 'utilisation ratio' – the percentage of their time that is directly billable to the client. For a technologist working in a large firm who spends most of their time drawing, this may be close to 100%. However, for a Director of a mid-to-large practice, this will probably be 0% – their job is to win work and manage the company; none of which is billable.

If we take the above example of a sole practitioner Chartered Architectural Technologist who is tendering for a small domestic extension planning application, they have estimated 32 hours of their time to complete the application. However, in real hours, this could account for up to 53 hours of practice time.

Winning the project
Say a practice wins 1:3 projects that they bid for (which is better than average if a domestic client is approaching four or five practices). It could take approximately four hours to travel to meet the potential client, travel back, produce a detailed fee quotation letter and possibly a sketch. That already equates to 12 hours unpaid... just to win a 32-hour project.

Let's add an hour per week for CPD (required by professional body), another for expenses and accounts, another for networking and submitting to awards and competitions, and another for social media and marketing (including marketing guides like this!). Then let's add two hours per week for admin such as project directory updates, insurance, updating T&Cs and policies, reviewing CVs, and ordering stationary. Finally, let's take 10% of the project, so three hours, as contingency for tweaks and unexpected queries from the planner or the client.

That is already 53 hours.

And this does not even consider aspects like fielding new enquiries, scope creep, creative time, or office socials. It also assumes you have a perfectly consistent steady stream of work coming through the studio door with zero downtime. So, what can you do to maximise profitability?

Maximising profitability: initial consultations
When a Chartered Architectural Technologist gives an initial consultation, please remember you're not a tradesperson just there to "give a quote". The Chartered Architectural Technologist will be offering professional advice on the design, budgets, the planning process, as well as buildability advice. You wouldn't expect an accountant to travel to your house and give you free financial advice. As a profession, we should normalise charging a fee for this.

Maximising profitability: efficiencies
Having a good set of templates is the backbone of any practice, from drawing templates to fee proposal. These documents will save employees' time several times a day. Think about all of your regular processes and how they could be streamlined. For example, do you still have to manually log in to your banking website to check a payment, or is it automated to either send a payment notification or generate a reminder?

Maximising profitability: reducing scope creep
Do your T&Cs set out exactly how many rounds of comments the client can give? Or the level of coordination, commenting and collaboration with other consultants? Tighten up your T&Cs to focus the client and stop any scope creep before it begins.

This is a very interesting time for our industry. If we continue to invite transparent conversation about the cost of being an Architectural Technologist, we can ensure that we are charging fairly and maximising profitability. ■

Lee Smith has been a Chartered Architectural Technologist for 25 years and is a Director of CIAT Chartered Practice, Cambridge Architectural Design.

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Honorary Officer elections 2025: your opportunity to influence your profession and discipline

The election process and how you could become influential within your Institute, shape its future and that of your profession.

For the effective operation for any professional body, it is essential that it elects positions from amongst its membership to allow it to function within its Charter. These positions are open to Chartered Architectural Technologists who are invited to give their enthusiasm, experience, strategic leadership, skills and time in a voluntary capacity to the work of the Institute set within the Strategic Plan. Contributing in such a capacity is two-way and Chartered Architectural Technologists who have been involved have benefited and learnt from their experiences.

Within the Institute's governance, there are a number of core roles collectively known as the Honorary Officer positions. These are the President, Honorary Secretary, Honorary Treasurer, Vice-President Education, Vice-President Practice and Vice-President Technical. These are all undertaken by Chartered Architectural Technologists in a voluntary capacity other than expenses which are paid for by the Institute.

For 2025, there are three positions for election which are now open for nominations:

Honorary Secretary

Together with the President and Chief Executive, the Honorary Secretary is responsible for ensuring the smooth running of the Council, Executive Board, AGM and Conduct Committee in line with the Laws of the Institute (the Charter, the Bye-laws, the Regulations and Code of Conduct and other forms of regulatory provision made by the Institute).

Council meets twice a year and the Executive Board four times, twice in conjunction with Council.

Working with the Chair of the Conduct Committee, the Honorary Secretary is required to attend these meetings which are held at least four times a year.

Members who undertake this position must possess strong analytical skills and the ability to make informed decisions and considered judgments. The ability to interpret and understand information and evidence is essential, as is good communication and presentation skills. For Conduct, the Member must be prepared to read, at times, a considerable amount of case papers.

Vice-President Education

The Vice-President Education works with the Education and Membership Departments on issues such as the development, maintenance and promotion of educational and membership standards, qualification development, Accreditation and membership recruitment, retention and progression.

The Vice-President Education is invited to attend all meetings administered by the Education and Membership Departments and will represent the Institute at relevant external meetings and events.

A Member who undertakes this position must have a very strong academic background with considerable experience and knowledge of higher and/or further education and research, as well as a good understanding of educational establishments' relationships with professional institutes. They must be prepared to confidently represent and promote the Institute externally, particularly in regard to education and membership.

Vice-President Practice

The Vice-President Practice promotes the Institute's practice standards and policies for members practising the discipline of Architectural Technology. As such, the Vice-President Practice works closely with the Vice-President Technical, Head of Practice & Technical and Practice Department in overseeing the work of the relevant Taskforces and working groups. These groups cover topics on liability, practice and technical documents, building regulations and legislative issues.

The Vice-President Practice may be involved directly or indirectly with these groups but reports to the Council and Executive Board on the work of these groups and their output and that of the Practice Department.

In carrying out these activities the Vice-President Practice:

- represents the members externally relating to industry issues, lobbying for change or improvement and lobbying and promoting on behalf of the discipline;
- ensures the necessary documentation is produced for the membership's benefit on changes in legislation or regulations; and
- ensures the appropriate guidance is available to assist members in implementing and complying with legislation and regulations in their work and complying with the Institute's policies and Code of Conduct.

A Member who undertakes this position must be a practising Chartered Architectural Technologist and have knowledge of the contractual side with an understanding of legislation and regulations. They must also be confident and able to represent the discipline at the highest level which includes Government.

All candidates must be able to undertake business via email or other electronic mediums.

What do these positions involve?

With each of these positions, you will become a Trustee of CIAT and a member of the Executive Board, which is responsible for the implementation of the Strategic Plan, found on our website. The Board makes guidelines for the conduct of business of the Institute, in line with the rules of the Institute and policy. You will become a member of Council, which is the Electoral College and Strategic Forum for the Institute. You will be expected to contribute to the policies and future strategic development of the Institute.

What does being a Trustee involve?

Trustees have an overall legal duty to the Institute and are the individuals who take decisions. Trustees have specific duties and operate within the rules of the Institute. Trustees work collectively as the Executive Board and once a decision has been collectively made – all Trustees are bound to support that decision. A Trustee's primary duty is to the Institute and its Charter under which it is established, as such Trustees must act with integrity and adopt the values which helps CIAT achieves its strategic aims.

What are the time commitments to these roles?

You should be looking to commit up to five hours a week (approximately) but this will depend on the nature of the work, meetings, providing views and advice on documents, the time of year and external representation on behalf the Institute that may be necessary. It is essential you are proactive and reactive dependent on the project work required. With all the positions, you will be working closely with a staff Head at Central Office, and their departmental team and be expected to respond to queries speedily at times; this could be within a couple of hours. There will be specific meetings or working groups that you may need to participate in and possibly chair.

As an Honorary Officer, you will be expected to attend two Council meetings (normally on a Saturday in March and September) and a minimum of four Executive Board meetings (two of which run in tandem with the Council meetings) as well as the AGM (normally in November) and the AT Awards event (October). The positions, excluding President Elect/President, are two-year terms, which become effective from the close of the 2025 AGM in November to the close of the 2027 AGM.

Representing the Institute and discipline

As representatives of the Institute, these positions require you to attend events and meetings on behalf of the Institute, for example, Construction Industry Council meetings, Award presentations, university events, or Government led steering groups, presenting at conferences etc. There will be specialist meetings which you will either have to attend/chair or contribute to, and you will need to report back to Central Office on these. The staff Head will work with you to ensure that you are properly briefed and prepared for these meetings where you will be expected to speak on behalf of CIAT and the discipline of Architectural Technology.

Social media

You would work with the Creative & Communications Department in relation to social media engagement.

What do I benefit from taking on a position?

You will have the chance to shape the future of your discipline, profession and the Institute at a strategic level. If you have ever wondered why something has or has not been done then now is your chance to do something positive about it. You also get to network extensively with peers and fellow professionals, gain a greater insight behind the scenes at Institute, Governments and sister institute levels and it contributes to your CPD obligations.

How can I be nominated?

To be nominated for any of the positions, a fellow Chartered Architectural Technologist must nominate you in writing to the Head of Creative & Communications. Any Chartered Architectural Technologist is eligible to propose a candidate, although no nomination is permitted without obtaining the prior consent of the nominee. Any Chartered Architectural Technologist can stand for any position in these elections. No prior experience is required of the Institute – just a passion for Architectural Technology and the Institute.

What happens once I have been nominated?

Once a nomination has been received, you are then asked to formally accept or reject the nomination. You will then be asked to supply a manifesto. Once all the manifestos have been received, they will be issued to the Regional/ Centre Committees for their review, consideration and action. It is then your responsibility to actively organise and carry out your election campaign (at your own cost) to all members and affiliates, this will be via the Creative & Communications Department and direct liaison with Regional and Centre Committees. Your campaign can be by a variety of mediums which is for you to choose. We provide you with the contact details of the Regional/ Centre Committees. Hustings are also held.

You will need to prepare a full manifesto for publication and distribution via the Institute's media channels; details of what we would be looking for in the manifesto will be included in the election section of the website and information pack. It will also be featured in the spring issue of AT Journal.

We will provide further clarification on the election process and information required. Over the election process, and the lead up to the elections in September, we will be issuing some election special ealerts providing reminders and updates together with profiles of the candidates standing for the positions etc.

If I stand how do I promote my candidacy?

There are a number of ways in which you can put yourself in front of the members and affiliates during your election campaign.

There is the traditional manifesto which will outline your policies, thoughts and aspirations for both the role you are nominated for and the Institute. This should not be a CV but a formal written document which grasps your key objectives and aims. Alongside this, you can create a profile which showcases you as a person, captures your personality and strengths and puts across the real you to people who do not know you and want to know more about the person seeking election.

In this technological and social media focused world, you can create LinkedIn or X (formerly Twitter) accounts, videos, podcasts, blogs or a series of short films which support your manifesto and profile. You can get your message across simply and they can all be easily accessed.

You could arrange for a Q&A with members and affiliates online or at a location and venue that is accessible and could have visits to Regional and Centre Committees and meet with Council, those who will be voting on the day. There are a number of different mechanisms which will be covered in the information pack.

What is the voting procedure?

- Regional/Centre Committees are encouraged to meet and discuss their preferred candidate, in an open forum which takes into account feedback from the members and affiliates in the Region/Centre.
- It may be that you wish to proactively engage with the Regional/Centre Committees to present your manifesto and respond to questions.
- Regional/Centre Committees advise their Councillor of their preferred candidate.
- The Councillor is expected to vote in accordance with their Regional/Centre Committee's decision; however there may be exceptions where they may change their vote as per their Committee's instructions. These could be based upon the candidate's response at the autumn Council meeting or other factors, for example, if the candidate withdraws from the election at very short notice that would not allow a Councillor reasonable time to refer back to their Regional/Centre Committee.

How is the vote taken?

Elections are held at the autumn Council meeting:

- All candidates are invited to attend the autumn Council meeting to respond to questions brought by a Councillor from their Regional/Centre Committee or to debate a particular issue in relation to their manifesto.
- Council confirms and agrees the method of the election – which has traditionally been by secret ballot.
- Councillors represent their Region/Centre – either using their agreed Committee's vote or changing their vote as per their Committee's instructions based upon the candidate's presentation or other factors.
- Honorary Officer members of Council have a free vote according to their preference (as Trustee) and considering the best interests of the Institute and its Strategic Plan.
- Council votes on the candidate and/or candidates and the election takes place.
- Council policy is that a candidate who is also a serving member on Council may not vote if there are other Candidates standing who do not sit on Council, this includes Honorary officers.
- Council policy is that Regions/Centres do not have the right to send a proxy vote if their Councillor is standing for a position.
- It is the Councillor who carries the vote, or their deputy, in their absence. A serving Honorary Officer who is standing against a candidate who is not a member of Council forfeits their vote. This ensures equity and fairness.
- The President, as Chair, has the casting vote if there is a tie.
- The elected Chartered Architectural Technologist assumes the Officer position from the close of that year's AGM (normally in November), unless an Officer resigns from their position early, in which case the assumption is either immediate or from the date of resignation if later.
- The results are then reported to the members and affiliates via the weekly ebulletin, AT Weekly and Regional/Centre Committee.

When would I assume the position if I were elected?

All three positions take effect from the close of the 2025 AGM in November 2025.

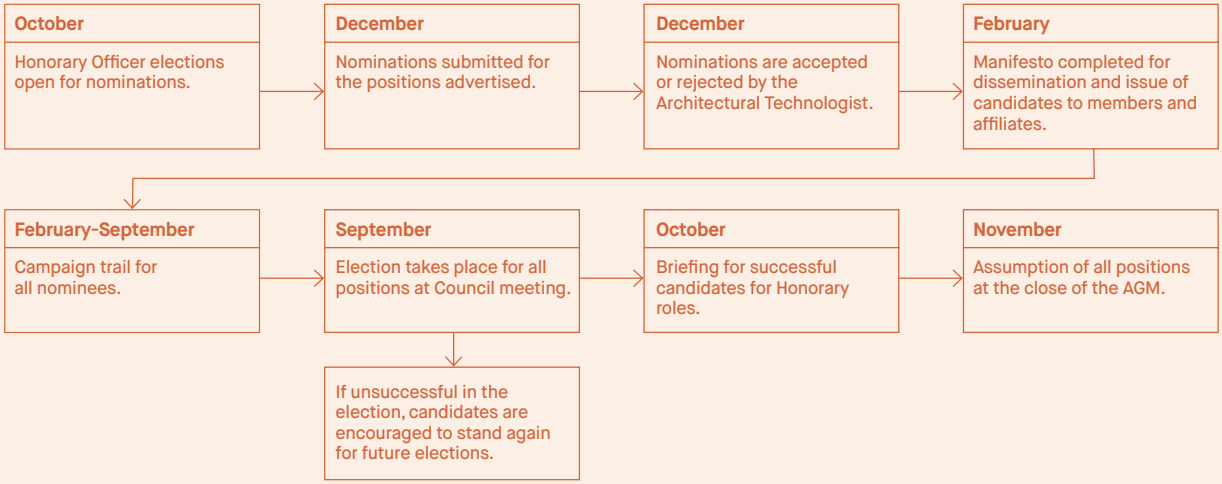
Key dates summary

- Call for nominations close
  13 December 2024
- Acceptances (or rejections)
  23 December 2024
- Manifestos/profile received
  3 February 2025
- Issue of candidates and their manifestos to all members and affiliates via an ealert/update of election section of the website
  3 March 2025
- Presentation at Council
  8 March 2025
- Campaigning by candidates
  3 March – 13 September 2025 inclusive
- Election ealerts and updates on the website
  3 March – 13 September 2025 inclusive
- Election at Council
  13 September 2025
  Candidates advised if not in attendance at Council
- Ealert announcing the election results
  15 September 2025
- Assumption of position
  November 2025 close of 2025 AGM

Further information

For further information or clarification contact Adam Endacott, Head of Creative & Communications, a.endacott@ciat.global

Election flow chart



Amplifying your voice: Introducing CIAT's new Policy and External Affairs Team

Words by Jack Fleming, Policy & Public Affairs Executive

In the run up to the recent UK general election, many of you will have seen CIAT's manifesto analysis and recommendations for the next government on our website. These are the first pieces of work from the Institute's new Policy and External Affairs workstream, recently launched to amplify the voice of our membership and shape public policy.

Sitting within the Practice and Technical Department, CIAT's new Policy and External Affairs Team will work with members, sector bodies, local and national governments, and international organisations, to give Architectural Technology a stronger voice in sector policy discussions.

The team will focus on themes such as the potential of Architectural Technology professionals to lead the sustainability transformation in the built environment, the need to strengthen skills and training pipelines to meet the future demands of the sector, and the importance of including Architectural Technology professionals in public sector procurement opportunities.

Day to day, the team's activity will include:

- meeting with MPs, civil servants and government ministers, to discuss key issues.
- contributing to parliamentary enquiries, debates and committee hearings.
- responding to government consultations.
- preparing policy papers and briefings that explain key issues to policymakers.
- strengthening CIAT's relationships with other sector bodies.
- building awareness of Architectural Technology within the media and broader public.

CIAT has created two new roles for this workstream: Business Development and External Affairs Executive, and Policy and Public Affairs Executive.

Mervyn Pilley,
Business Development and External Affairs Executive, joined CIAT following an extensive career leading membership organisations, most recently with a focus on energy and sustainability.

Jack Fleming,
Policy and Public Affairs Executive, joined CIAT from a specialist healthcare public affairs and communications agency. He has previously held several policy and public affairs roles, including leading on workforce policy for the Royal College of General Practitioners.

Mervyn and Jack will work collaboratively with colleagues across the Institute and will be looking to engage with the membership, to ensure CIAT reflects their priorities and provides robust, evidence-based recommendations that will deliver a better built environment sector. This will build on current initiatives, including the newly piloted societies and workshops for developing consultation responses.

To keep up to date with the work of the team and opportunities to engage, keep an eye on AT Weekly. If you'd like to discuss a specific issue, we invite you to email us at **externalaffairs@ciat.global**.

Chartered Architectural Technologists

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

038801	Daryl Atkinson	Northern, 01
026647	Nick Ivill	Northern, 01
034682	Jack Lee	Northern, 01
034033	Cameron McAuly-Brand	Northern, 01
034756	Oliver Close	Yorkshire, 02
032784	Asha Landa	Yorkshire, 02
036820	Brian Lynch	Yorkshire, 02
033040	Mathew Morgan	Yorkshire, 02
022126	Matthew Thompson	Yorkshire, 02
034194	Ben Hay	North West, 03
037980	Paul Marshall	North West, 03
037802	Samuel Seccombe	North West, 03
037814	Nathan Sunderland	North West, 03
036197	Paul Wilkinson	North West, 03
038343	Victoria Bell	East Midlands, 04
031281	Imants Lacs	East Midlands, 04
027758	Dhiran Rathod	East Midlands, 04
015194	Anna Bebbington	West Midlands, 05
029981	Adam Durber	West Midlands, 05
011285	John Eyers	West Midlands, 05
015835	Jay Hawkins	West Midlands, 05
028562	Dilyana Kamenova	West Midlands, 05
035305	Magdalena Wanowicz	West Midlands, 05
036778	Nicholas Wilbraham	West Midlands, 05
031725	Stephen Yapp	West Midlands, 05
017356	Andrew Batty	Wessex, 06
030699	Matthew Redfern	Wessex, 06
034255	Joseph Wood	Wessex, 06
034199	Berenika Gurdziel	East Anglia, 07
025926	Joshua Knight	East Anglia, 07
020752	Neil Murray	East Anglia, 07
033371	Daniel Russell	East Anglia, 07
023593	Darren Palmer	East Anglia, 07
036148	Tomas Nellist	East Anglia, 07
035061	Ryan Wright	East Anglia, 07
028447	Michael Baggs	Central, 08
035243	Silviu Horatau	Central, 08
018393	James Joyce	Central, 08
028960	Luke Kenton-Woods	Central, 08
032000	Robert Marsh	Central, 08
031527	Eleanor Pattinson	Central, 08
036140	Martyn Phillips	Central, 08
036838	Jack Stacey	Central, 08
028816	Eduardo Baquedano Sanchez	Greater London, 09
036841	Manas Khanna	Greater London, 09
020381	Anthony Murphy	Greater London, 09
038131	Santiago Rebolledo Pulgar	Greater London, 09
032669	George Smith	Greater London, 09
038758	Cristina Tarlev	Greater London, 09
027031	Harry Ward	Greater London, 09
037941	Sarah Goad	South East, 10
037008	Niina Grinsted	South East, 10
031934	Robert Page	South East, 10
034217	Stephen Pokora	South East, 10
021353	Thomas Sheldrake	South East, 10
037413	Philip Viveash-Brainch	South East, 10
028874	George Nichols	Channel Islands, 11
021815	Benjamin Marlow	Western, 12
014437	Michael Pennance	Western, 12
035223	Matthew Selleck	Western, 12
029019	Thomas Thiele	Western, 12
038169	Mark Thomas	Western, 12
031657	Jonathon Offord	Scotland West, 13
038439	Colin Thompson	Scotland West, 13
030862	Alasdair Germain	Scotland East, 14
028371	Conor McElhone	Northern Ireland, 15
023015	Christopher McIvor	Northern Ireland, 15
028383	Nicholas Robinette	Northern Ireland, 15
021178	Daniel Barlow	Hong Kong, C1
026912	Roy Harvey	Republic of Ireland, C2
016106	David McGourty	Republic of Ireland, C2
024607	Steven McAleer	The Americas, C4
037955	Jeanna O'Toole	The Americas, C4
010743	Darren Vickers	Europe, C6

Welcome back

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

023059	Michael Griese	East Anglia, 07
007568	Ian Turvey	Central, 08
021377	Mkhululi Blose	South East, 10
018318	Ian Taylor	South East, 10
028460	Joseph Elliott	Western, 12
014870	James Hamilton	Scotland West, 13
023733	Martin Owen	Wales, 16

Fellow Members

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

016436	Glen Smith	West Midlands, 05
009519	Stephen Brown	East Anglia, 07
036822	Spaska Bondarenko	Greater London, 09
020204	Theresa Buxton	South East, 10

CIAT-Accredited Conservationist

We would like to congratulate the following Member who successfully attended their CIAT-Accredited Conservationist qualification:

030400	Darryn Marrs	Western, 12

Registered Principal Designer

We would like to congratulate the following Member who successfully attended their Registered Principal Designer non-HRBs qualification:

008885	Anthony Watts	East Anglia, 07

In memoriam

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

001637	David Jackson	Yorkshire, 02
011342	Kevan Dean	North West, 03
030030	Sarath Kizhuppally Ramakrishnan	West Midlands, 05
000511	Derek Stone	Central, 08
002129	Peter Gibbons	Greater London, 09

Education Bursary open for students facing hardship

CIAT is able to fund two students facing difficulties each year by providing a bursary up to the value of £500 each. This funding will enable students to purchase necessary items such as books, equipment, materials or to contribute towards tuition fees, which will help to support their studies.

In order to be eligible to apply, applicants must be members of CIAT, (but not Chartered Members), registered on an CIAT Approved or Accredited programme, and facing hardship.

Students wishing to be considered for a bursary should speak to a member of academic staff as soon as possible. The programme tutor must provide a supporting testimony about the student's circumstances in the form of an electronic letter which is to be endorsed by a signature from the Head of Department or equivalent. N.B. CIAT will only accept one submission per institution.

Entry: Supporting testimony from the programme tutor with an endorsing signature from the Head of Department, or equivalent.
Applications: Open until Friday 6 December 2024
Funding: Two bursaries up to £500
Contact: education@ciat.global

Exclusive Insurance Scheme For Chartered Architectural Technologists

CIAT
INSURANCE SERVICES

MFL have been providing bespoke insurance solutions for Members of CIAT for over 25 years.

Key Benefits:

- Competitive premiums
- Bespoke cover tailored to you
- In- house claims service
- Free contract vetting service
- Free legal helpline
- Run off cover

Who are CIAT Insurance Services?

MFL Insurance Group Ltd have worked with the Chartered Institute of Architectural Technologists for over 25 years to provide the Members with bespoke insurance solutions specific to the work they carry out.

What types of policies and services can you assist with?

We offer a full range of insurance products covering all aspects of the Members business, including a bespoke Professional Indemnity Insurance scheme as an exclusive membership benefit to Chartered Architectural Technologists.

What differentiates CIAT Insurance Services from other insurance brokers or insurers?

Whilst it may be easy to find an "off-the-shelf" insurance policy, these may not accommodate the risks and challenges faced by CIAT Members and could leave gaps in the cover provided.

As a trusted partner of CIAT, we understand your profession and assist CIAT Members on a daily basis. This enables us to maintain a comprehensive understanding of the profession and its unique requirements and provides us with a wider view of the risks, challenges, trends and new developments that may impact you and your business.

Our CIAT facility policies have been developed exclusively for CIAT Members with tailored coverage to cover their needs at competitive premiums.

As there are also a number of pitfalls that could impact on the CIAT Members, new and old, which could prove costly in the event of a claim, it is also important you receive suitable advice. Our experienced insurance advisors are on hand to assist you in ensuring that the most appropriate cover is in place.

What other benefits and services do you offer to Members of CIAT?

Beyond the experienced insurance advisers, we also have an experienced in-house claims team, many of whom have a legal background, who are on hand to support and advise you throughout the claims process. We regularly receive referrals from clients who have had a claim and have appreciated the high standard of service provided by our claims team.

We also offer a free contract vetting service where we can review your contracts in relation to whether they impose obligations which may not be covered by your professional indemnity insurance.

Another benefit provide to CIAT Members is a free legal helpline provided by a high-profile law firm for one-off queries relating to the conduct of your business.

www.ciat-insurance.co.uk **0161 233 4497**

MFL INSURANCE GROUP