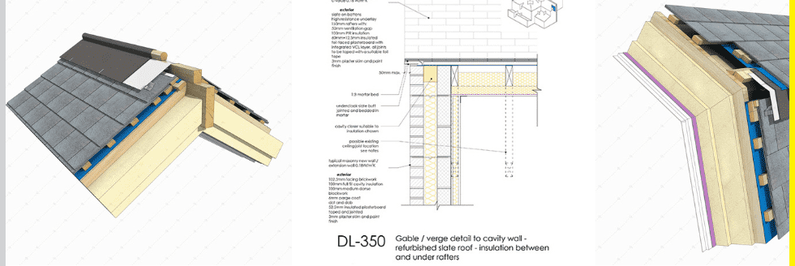
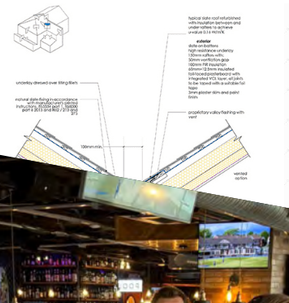
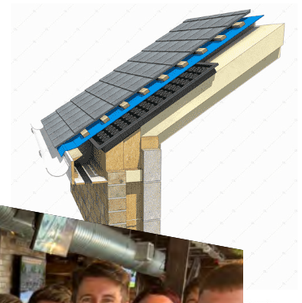
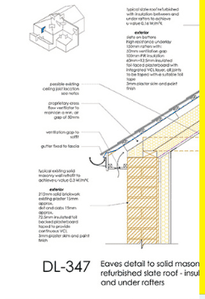








aspiration magazine

Issue 20
Summer 2025

CIAT aspiration
Nurture. Network. Develop.

A word from the Editor

Welcome to the summer 2025 issue of ***aspiration Magazine*** – an e-magazine shaped by ambition, creativity, and a shared vision for the future of Architectural Technology.

This issue arrives at a moment when the built environment continues to respond to a rapidly evolving world. From groundbreaking innovations like Schindler's MetaCore vertical mobility system to the powerful intersection of design and well-being explored by The School of Biophilia, this edition contains ideas that inspire and challenge us to think differently.

We continue to celebrate the next generation of professionals – students, graduates and emerging Architectural Technologists – whose journeys, whether in lecture theatres, on-site internships, or presenting projects at Parliament, illustrate a profession full of momentum and possibility.

We also spotlight industry-wide initiatives like the B.E. Inclusive partnership, where collaboration across the disciplines is forging a more equitable and representative future for all in the built environment.

There is also practical career advice and reflections on technology's role in transforming cities.

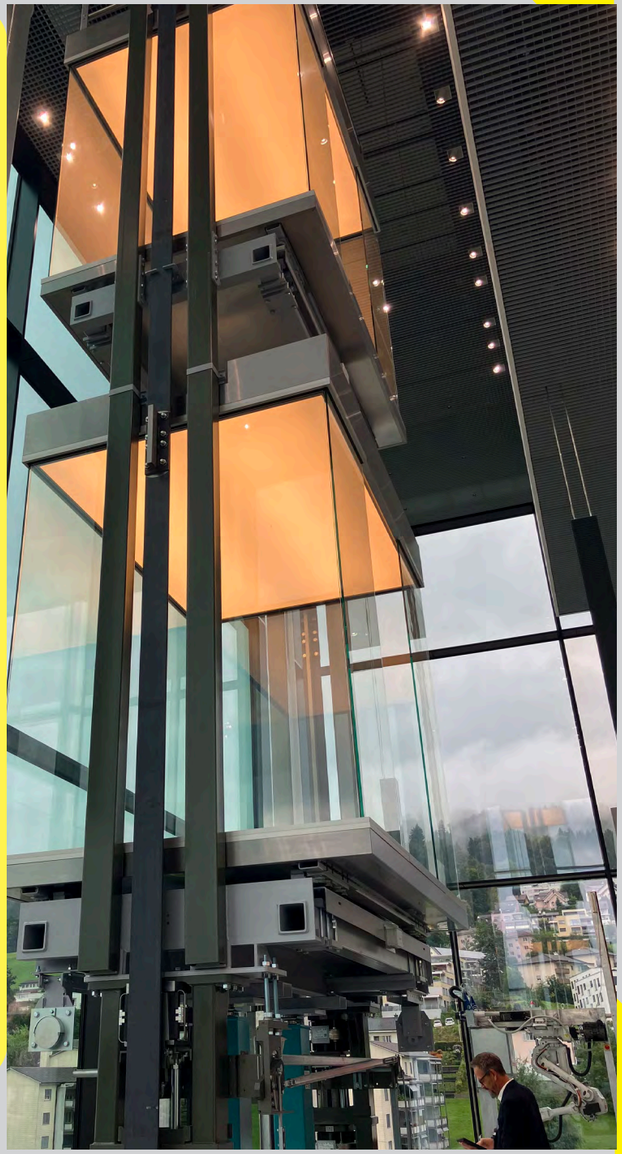
Whether you're just starting out, mentoring others, or driving innovation in your practice, I hope this issue leaves you feeling informed and inspired.

April McKay
Editor

Get in touch if you have any feedback, ideas or content for the next issue.

Email a.mckay@ciat.global

In this issue...



CIAT aspiration

Nurture. Network. Develop.

You might often picture what your career as an Architectural Technology professional or Chartered Architectural Technologist will look like, but find it harder to picture how it will start.

It is never too early to start networking and being affiliated and engaged with organisations as this may be fruitful later in your career; either because you know who to contact or perhaps to find your next role. This is why CIAT is committed to helping your career in AT get started through our aspiration community.

What is aspiration?
aspiration is an inclusive global community of members and affiliates, made up of students, graduates, Associates, affiliates and recently qualified Chartered Architectural Technologists. aspiration supports aspiring professionals and helps to shape the future of the profession.

When you join CIAT, you are automatically a member of aspiration. You can become more involved at a Regional/ Centre level with the local aspiration Chair who heads the local aspiration Group.

aspiration is led by Joe Hyett MCIAT, a Chartered Architectural Technologist based in the Wessex Region.

What does it do?
One of aspiration's main aims is to assist students, graduates and newly qualified members into the profession. They host events such as site visits, practice interviews, networking events and social gatherings. aspiration offers so much more than just events however – aspiration Groups engage regularly with schools and universities through presentations and careers fairs, helping to encourage the young professionals of tomorrow into the sector.

aspiration collaborates with other groups within the built environment, including Novus (CIOB), Matrics (RICS), YEN (CIBSE) and FAN (RIBA). The aspiration Chairs also work with their local CIAT Approved/Accredited programmes as well as Regional/Centre Committees.

Why get involved?
With the aspiration network located all over the country, the opportunities are vast; choose to attend an event, deliver a presentation or sit on an aspiration Group. Your level of involvement is up to you. There is something for everyone in aspiration. You may simply want to come along and meet some of your fellow Architectural Technology colleagues, maybe attend one or two CPD seminars, network at an event or seek some support through your local Chair.

How do I get involved?
It is very easy to get involved and there are many ways of doing so. If you know a Regional/Centre Committee member, Programme Leader or aspiration member, find out about when the next event, CPD or meeting is taking place, and introduce yourself.

Email aspiration@ciat.global to be introduced to your local aspiration Group.

Get in touch and become involved with aspiration and CIAT!

CIAT becomes part of B.E Inclusive

Words by CIAT

CIAT and seven other professional bodies have agreed to cooperate with the purpose of creating a built environment sector that is as diverse as the communities it represents.

That is, a built environment that acts inclusively, treats everyone fairly and provides a culture that delivers the best outcomes for the diverse societies in which and for whom our collective memberships work.

The other leading professional bodies are:

- Chartered Institute of Building (CIOB)
- Chartered Institution of Civil Engineering Surveyors (CICES)
- Institution of Civil Engineers (ICE)
- Landscape Institute (LI)
- Royal Institute of British Architects (RIBA)
- Royal Institution of Chartered Surveyors (RICS)
- Royal Town Planning Institute (RTPI)

The partnership will be known as B.E Inclusive.

In mid-May, a Memorandum of Understanding was signed by representatives of all eight bodies, including CIAT Chief Executive Tara Page (pictured). It states that signatories "recognise the potential of our combined membership to affect a meaningful and tangible improvement in Equity, Diversity and Inclusion (EDI) standards across the built environment."

All professional bodies agree to collect and analyse their member data to facilitate a meaningful comparison across their collective membership and help to formulate a clear picture of the wider built environment sector. This analysis will inform targeted action to improve EDI outcomes.

The partnership will include monthly meetings (with each body nominating an EDI lead) with the aim of jointly developing and monitoring an annual programme, and an annual EDI budget for each party to contribute to the costs of jointly hosted events throughout the year.

Tom Gray MCIAT, Chair of the AT EDI Society, said:

> "We are absolutely delighted to be a part of B.E Inclusive. We look forward to working with our sister Institutes on equity, diversity, inclusivity, and making sure the built environment is a safe and welcoming community for all professions."

aspiration Chairs gather in Leeds!

Words by Sam Lambert MCIAT, Chair, aspiration Yorkshire

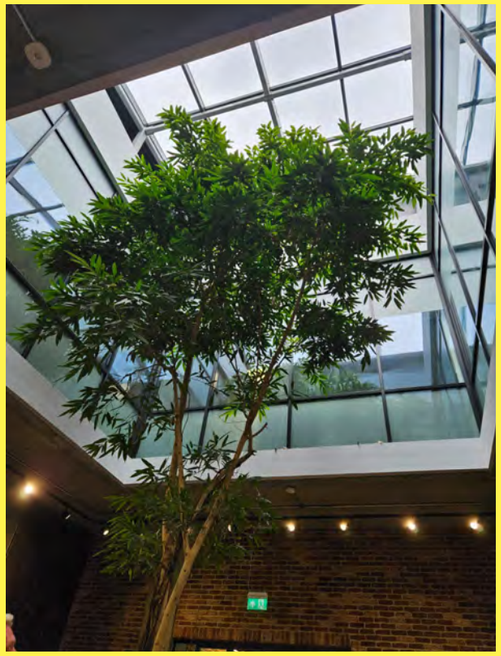
As the CIAT aspiration network continues to grow, its Regional Chairs meet in person twice a year for a day filled with activities, networking, and discussions on Regional initiatives.

Traditionally, these gatherings take place annually at CIAT's Central Office in London. However, this occassion marked a significant milestone as the Chairs met outside the capital for the first time, kindly hosted by the Yorkshire Region.

The aspiration Yorkshire Committee, led by its Chair, Sam Lambert MCIAT, Vice-Chair Kieran Ashton ACIAT, and Committee member Jamie Greenwood, organised a well-rounded day of activities.

The event began with the ever-popular CIAT Yorkshire Region Coffee Club, hosted by Natasha Coles MCIAT and Alastair Kennedy MCIAT. This informal gathering allowed for a relaxed start, with Chairs arriving from across the UK—and even Denmark! Coffee Clubs are held monthly, offering CIAT members and affiliates a space to connect, exchange ideas and engage in meaningful conversations.

These conversations naturally flowed into more formal discussions, which took place at DLA Architects, who kindly offered their boardroom for the day. The meeting, chaired by the overarching aspiration Chair Joe Hyett MCIAT, allowed Regional Chairs to share insights, brainstorm initiatives and work towards a more unified, and structured, aspiration programme across all Regions and the Europe Centre.



Following a productive session, attendees took part in a walking tour showcasing several of DLA Architects' projects across Leeds. The tour ended at Fortrea, where the group was treated to an exclusive look at their newly completed clinical trials facility. This project, a remarkable example of adaptive reuse, is part of the £500 million redevelopment plan to revitalise eight acres of brownfield land on Leeds' South Bank. A special thank you to David Simpson and Heather Saywell at Fortrea for the warm welcome and insightful tour.

To close out the day, the group attended a thought-provoking presentation titled *"Education's Impact on Architectural Technologists"*, delivered by Neil Berry, Tahira Hamid MCIAT and Johnathan Bennett MCIAT on behalf of Leeds Beckett University. The presentation sparked meaningful discussions that will undoubtedly influence the work of Regional Chairs moving forward.

The event was an overwhelming success, leaving attendees energised and inspired. If you're interested in joining your local aspiration Group, reach out and we'll connect you with your Regional aspiration Chair.

From studio to site: My journey through Architectural Technology

Words by Trishan Mepani ACIAT, BIM & Architectural Technologist, David Miller Architects

When I first stepped into the world of Architectural Technology, I had only a vague idea of where it might lead and how much it would shape my career.

I was drawn to the idea of bridging creativity and technical precision to create spaces that are not just aesthetically pleasing, but functional and efficient. Over the years, that vision has evolved, driven by hands-on experience, collaborative challenges, and a deeper understanding of the built environment.

Choosing Architectural Technology: A practical passion
Originally, I set out to pursue a career in architecture. But as I explored further, Architectural Technology emerged as the perfect fit. What drew me in? The focus on practical application, 3D software, and Building Information Modelling (BIM) appealed to me. The discipline combines design with the technical side of construction – it wasn't just about imagining beautiful spaces but about making them buildable, efficient, and sustainable. This blend of creativity and technology seemed like the ideal path for my skills and interests.

Work placement: A digital challenge during lockdown
Like many students at the time, my second-year placement coincided with a global pandemic and worldwide lockdown. I joined FINC Architects for a two-week remote internship. Despite the physical distance, the experience was invaluable. I worked on developing Stage 5 technical drawings for a residential project in Essex, collaborating closely with a senior Architectural Technologist. The placement gave me hands-on experience in detailing and documentation, helping me to understand how design decisions translate into real-world construction.

Recognition and awards
Recognition received during my degree at Middlesex University only affirmed my passion for Architectural Technology. My final-year project – a multi-purpose office building in Stratford, Newham – won the CIAT Greater London Student Award. More than just a workspace, its design featured social and community areas such as exhibition areas, cafés, and restaurants.

In my second year, I worked on a pavilion enclosure design which was shortlisted for potential construction by BPR Architects. To top if off, in my final year I received an Outstanding Achievement Award for my academic performance and development.

On-site insights
While site visits were limited due to COVID-19, one stands out as particularly impactful. In preparation for my final-year project, we visited the Carpenters Estate in Newham, the proposed site for the multi-purpose office building. Seeing the area's layout, scale, and social fabric helped me root my design in reality. It reinforced my approach and ensured that my design was both practical and contextually sensitive.

Entering the industry: From graduation to practice
After graduating, I joined David Miller Architects as an Architectural BIM Technician. A year and a half later, I was promoted to BIM & Architectural Technologist. My role has given me the chance to work across multiple sectors, including life sciences, residential, and theatre design. The transition from university to industry was swift, and I found that the skills and knowledge I built at university – especially in BIM and technical standards – set a strong foundation for success in practice.

Tools and resources: Essential for success
Tools like Revit, AutoCAD, Navisworks, IES, and SketchUp were staples during my studies – and remain essential in my current role. Revit was especially important for managing the BIM process, helping me coordinate complex design details and integrate multidisciplinary input. These tools helped me develop the technical skills necessary for working in industry and set me up for success in Architectural Technology.

> "I was drawn to the idea of bringing creativity and technical precision to create spaces that are not just aesthetically pleasing, but functional and efficient."

Elevating design

Words by Yashvi Bhagat, CIAT student member, Middlesex University

From the moment I embarked on my journey to study Architectural Technology, I was driven by more than just the ambition to design buildings – I was compelled by a desire to design with intention and purpose. My passion transcended the mere act of designing structures; I wanted to understand human development and the evolving societal needs and environmental challenges of our time.

Early in my studies, I focused on developing a strong structural perspective by creating spaces that fulfil practical needs and improve quality of life. I immersed myself in building regulations, construction sequences, and building systems. Exploring BIM workflows, project management, and sustainable design principles, reinforcing my commitment to functional spaces that embody community values and environmental responsibility.

In my third year at university, I developed a concept focused on an inclusive and sustainable retrofit design for the Williams Building at Middlesex University. My proposal aimed to transform the structure into a hybrid learning space for disabled and neurodivergent students while preserving 70% of its original office use, merging flexible office areas with dedicated inclusive learning spaces.

The proposal incorporated universal design principles, gender-neutral accessible toilets on every floor, solar panels, and communal layouts that foster interaction and academic support. This initiative addressed spatial inequalities and aligned with BREEAM standards and the UN Sustainable Development Goals, serving as the foundation for my final year project: a 100-meter-tall office building.

My journey through work placements has been a rich tapestry that extends well beyond the traditional classroom setting. As a Student Learning Assistant (SLA), I took on the rewarding role of supporting my peers in various design modules, leveraging my skills with software tools such as Revit. This hands-on experience not only sharpened my technical abilities but also provided a profound insight into sustainable material strategies and the nuances of embodied carbon assessments.

In addition to my academic endeavours, I had the privilege of being featured in a Women in STEM inverview, which illuminated the critical importance of representation in technical fields. This opportunity allowed me to share my experiences and inspire others to pursue careers in STEM disciplines.

My part-time role as an Assistant BIM Coordinator offered insights into live projects, site visits, and how drawings evolve into built form.

Last year, I was invited to present my second-year project at the Houses of Parliament where I had the opportunity to meet industry leaders – it was one of my proudest moments. More recently, my third-year project has been nominated for a student award which I am extremely excited about!

This year, Middlesex University students took part in a week-long internship in Dubai at the Burj Aziz, the second tallest building in the world. Engaging with engineers and designers gave me invaluable insight into the project. Meeting Mr Mirwas Aziz, founder of the Aziz Group who also worked on the Burj Khalifa and Petronas Towers, was unforgettable. His unique perspective on design, ambition, and impact left a lasting impression.

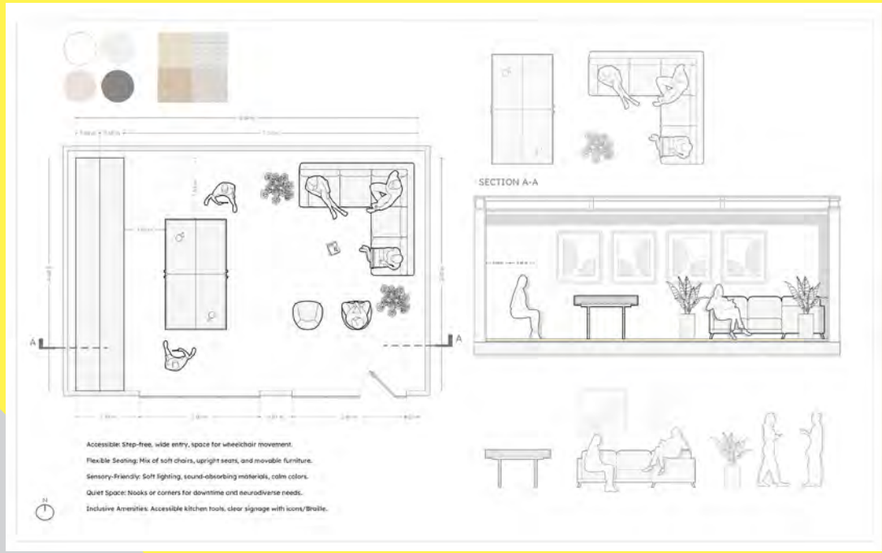
As part of my final-year project, I designed a 100-metre-tall office tower in Stratford, East London. The 25-storey building featured flexible open-plan offices, meeting rooms, and rooftop restaurants, focusing on technical innovation, sustainability, and inclusivity.

Structurally, I employed a steel frame with circular hollow section columns and a hybrid floor system combining hollow-core slabs and cellular steel beams, supported by a reinforced concrete core. For the façade I chose a triple-glazed curtain wall system with vertical timber louvres to reduce solar gain. I conducted a carbon performance and U-values analysis using OneClick LACA, comparing products from Kawneer and Senior Architectural Systems. The project highlighted the potential of high-rise buildings to benefit communities and the environment.

Proficiency in Revit is crucial for Architectural Technology students, supporting 3D modelling, technical drawings, and clash detection which is essential for understanding building assembly in complex projects like high-rises.

Beyond my studies, I believe creativity doesn't stop at the drawing board. I also pursue interests in digital design, photography, and storytelling on social media. These platforms allow me to connect with peers and share the journey of our projects.

With some hands-on work experience and a strong academic foundation, I feel ready to step into the industry.



Designing with purpose: My career in AT so far

Words by Ethan Ellis ACIAT, Architectural Technologist, DLA Architecture Limited

Having always had an interest in buildings and how they are constructed, I knew from an early age that a career in the built environment was the route I wanted to pursue.

Why I chose to study Architectural Technology
Initially, I considered studying architecture but after attending several careers fairs, I was introduced to Architectural Technology. I felt the blend of detailed problem-solving and creativity was a better fit for my skillset.

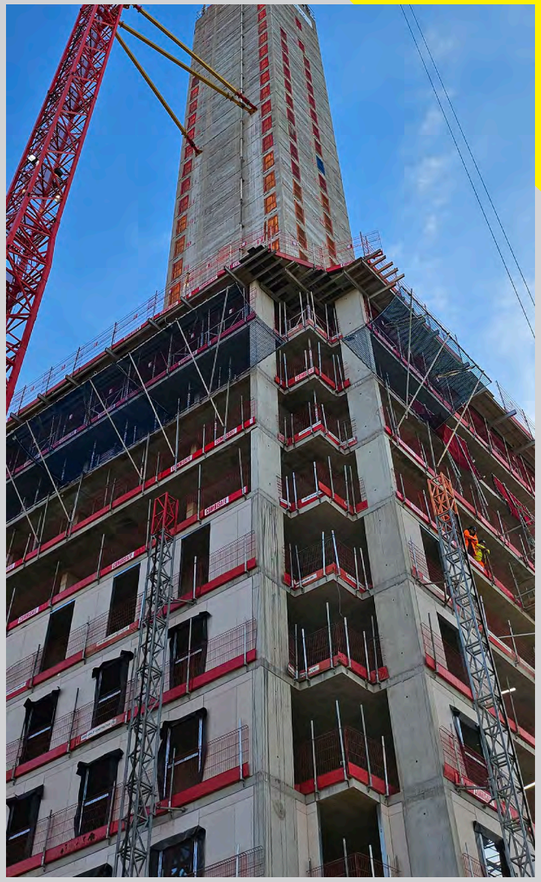
A few weeks of work experience confirmed that Architectural Technology was the career I wanted. Being able to help deliver safe, high-performing buildings is something special. Seeing a project evolve from a collection of drawings into a physical, enduring building has always inspired me – watching the building rise bit by bit drives me to produce the best work possible whilst working alongside the site team to ensure it is deliverable.

My experience in the industry
My route into the industry was slightly different from most. I began studying Built Environment and Design at college one day a week while working at DLA Architecture the other four days. After two years, I progressed to part-time study in

Architectural Technology at Leeds Beckett University, continuing with the same balance of study and work for five years. Throughout college and university I had the opportunity to work on a wide range of projects, gaining invaluable experience in structuring drawings, working to deadlines, and involvement in meetings. Assisting in the production of design and access statements, cleaning and maintenance assessments significantly supported my written assessments during my studies. Working alongside my education allowed me to graduate with a real understanding of the industry, refining both my technical and interpersonal skills. Having access to years of professional knowledge and experience was the most valuable resource for developing my own expertise.

My work
During university, I worked on a variety of academic projects. The first was a small housing scheme aimed at providing affordable terrace housing on the outskirts of Leeds city center. This served as an interesting introduction to domestic design and the associated details it requires. The second project was a hotel and visitors' center in northern Iceland – a challenging brief due to site constraints such as a fault line and a cave beneath the site. The final project was a large development in rural Spain, featuring a hostel, yoga studio, co-working and workshop space, and four small artist residences. These were designed with inspiration drawn from Antonio Gaudi, adding another layer of complexity and creativity.

At DLA, I have had the opportunity to work on a broad spectrum of projects. These have included a large industrial development in Rochdale, student accommodation in Coventry, and more recently, a 34-storey build-to-sell tower in Leeds. The tower shares the site with a 19th-century mill that is being restored and converted into apartments. My work has enabled me to expand my knowledge and gain experience across multiple sectors. My day-to-day work includes producing packages of drawings, reviewing and commenting on information from other consultants and



> "Working alongside my education allowed me to graduate with a real understanding of the industry."

subcontractors, attending meetings, and more recently, leading meetings.

Post graduation
Since graduating from Leeds Beckett University, I have been fortunate enough to continue working at DLA Architecture, collaborating with a talented team of fellow Architectural Technologists and Architects.

Recently, I've also had the opportunity to attend end-of-semester critiques and detailing workshops at Leeds Beckett for second and final year students. These have been excellent opportunities to help guide the next generation of Architectural Technologists. The end of semester critiques showcased a wide range of development in the students' work, where we were asked to explore their reasoning and approach to the brief. The detailing workshops are more relaxed, one-to-one sessions where students work on a specific detail with feedback and advice from industry professionals. Both experiences have been rewarding and a great way to give back to the university.

AT Awards 2025 close for entries in July

The AT Awards recognise the people and projects that demonstrate excellence in Architectural Technology.

Submit entries for:

- Student Project of the Year
- Student Report of the Year
- The aspiration Award for Emerging Talent in AT

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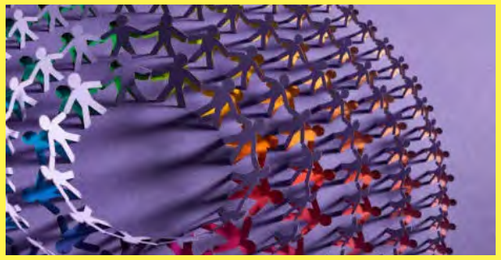
How coaching supports equity, diversity & inclusion

Words by PLD Mentoring

The CIPD, the leading professional body for HR and people development in the UK and globally, highlights that promoting Equality, Diversity and Inclusion (EDI) is a vital part of good people management.



EDI is about creating places where every individual feels safe, experiences a sense of belonging, and is empowered to achieve their full potential.

As coaching is designed to help the individual realise their potential, we wanted to explore the relationship between coaching and diversity and inclusion, something particularly worth reflecting on during Pride Month.

The Equality Act 2010 provides legal protection for nine protected characteristics: **age, disability, gender reassignment, marriage and civil partnership pregnancy and maternity, race, religion or belief, sex, and sexual orientation.** However, the CIPD also recommends that an effective EDI strategy should go beyond legal compliance by recognising wider aspects of identity that can advantage or disadvantage individuals, including accent, caring responsibilities, culture, gender identity and expression, mental health, neurodiversity, physical appearance, political opinion, family status, and socio-economic background.

Coaching plays a key role in supporting and encouraging equality, diversity and inclusion in several ways:

- **Personal and professional development:** Coaching helps individuals build self-awareness, emotional intelligence, and active listening skills – all of which are vital for working in diverse teams and stepping into leadership roles. It also supports individuals in recognising and challenging harmful behaviours.

- **Connecting diverse talent:** Coaching can help connect employees from underrepresented groups with leaders and mentors, aiding career progression and improving retention of diverse talent.

- **Addressing bias and prejudice:** Through coaching, individuals can explore their own biases, prejudices and misconceptions, enabling personal growth and greater empathy. It also gives individuals a safe, confidential and non-judgemental space to discuss EDI-related concerns and experiences.

- **Supporting EDI strategies:** Specific EDI coaching helps coaches and individuals examine potential barriers to inclusion and develop action plans to adavnce EDI initiatives. In turn, this can foster a culture of learning and improvement, and encourages active involvement in creating inclusive environments.

For coaching to truly support equality, diversity and inclusion, whether the coaching is EDI specific or not, it is important that the coaches exhibit certain competencies. Firstly, they should understand the importance of EDI and recognise the value of inclusion. The coach should be culturally competent, understanding the challenges faced by individuals from diverse backgrounds; and they should communicate inclusively, ensuring that their language and non-verbal behaviour is inclusive. They should check themselves to ensure that they are not exhibiting any biases or prejudices, ensuring that their approach is open and welcoming to all.

As we celebrate Pride Month – a time to reflect on inclusion, visibility, and respect for LGBTQ+ communities – it is an ideal opportunity to think about how coaching can help drive meaningful progress on equality, diversity and inclusion for everyone.

The job interview: Your guide to success

Words by Hays

Here are eight key actions to follow before, during, and after your interview.

1. Do your research

Before you enter the interview room, do your homework. Take time to review the company website, search for existing employees' LinkedIn profiles, and take the time to follow and study the company's social media channels.

Through proper research you will be able to get a real idea of the DNA and culture of the organisation, so you can then reflect that knowledge during the interview. In doing this, you are demonstrating to the interviewer that you have made a real effort to do thorough research, implying that you are very interested in the role.

2. Practice makes perfect

It's also worth considering some of the key interview questions you may be asked and prepare some answers that you may like to give. What are the most common interview questions for this particular role and sector? Do you have an idea of how you would answer these?

Study the job application and cross reference it with your CV. Are there projects, specific training courses or examples from your previous jobs that are particularly relevant? Have clear details of these that you are prepared to talk about.

Practise your answers out loud at home beforehand and, if you can, have someone listen and give you feedback. This kind of preparation will ensure that your suitability and keenness for the role comes across in the form of concise and composed answers that resonate strongly with the interviewer. This will also demonstrate that you have taken the time to practise your interview technique, so must care about the opportunity.

3. Bring a portfolio

Be sure to prepare a portfolio to issue in advance and/or take it to the interview as it will reflect your capabilities and experience within the discipline in more detail. Only include evidence that has been produced by you and demonstrate your current skill level. This should consist of relevant coursework from university/college and/or evidence from work placements. As your career progresses, your portfolio will grow and should be tailored accordingly.

4. Make a good first impression

The first few minutes are arguably the most important, as this is when your interviewer will gain a first impression of you.

Make sure you test any software in advance and arrive for your interview 5-10 minutes early, but not so early as to interrupt their schedule. Ensure beforehand that you know where you're going and are clear on who you are meeting so that you can be confident when you arrive. Dress smartly, even if it is not necessarily expected from the day-to-day job as this indicates a level of respect for the interviewer and your willingness to put effort into securing the job.

5. Ask questions

The interview is a great opportunity to learn more about the role and get a feel for the company. Consider asking if the position is new. If not, how has it evolved? This will provide you with some insight into the direction the business is taking.

Ask about the stakeholders of the position, the measurements of success and the tools you will have at your disposal to ensure you will exceed expectations. You may also learn something interesting about the organisational culture from these questions. Remember to ask the interviewer for details of their background too as this will help build your rapport with them and show your people skills.

Asking the above questions will show that you want the job on a number of levels. It will show enthusiasm and demonstrate your curiosity to learn more about the role, the interviewer and the business. You will also be able to strengthen your answers based on any insights that you get from asking these questions, demonstrating your attentiveness throughout the interview.

6. Don't overlook the importance of non-verbal communication

A smile, eye contact, and control of your hands while speaking all contribute to transmitting your enthusiasm to add value in the company.

Demonstrating your passion will certainly give you a competitive edge over the other candidates and provide you with the best possible chance of starting work in your dream job.

"Prepare a portfolio to issue in advance or take it to the interview to reflect your capabilities and experience in more detail."

7. Your final pitch

Once the question and answer segment is over, but before you leave the room, think about giving a one or two minute 'pitch' which wraps up why you're so interested in this role specifically. This is your last chance to make an impression, so be clear and precise. This may well be how the interview panel remembers you. Make it good. It may be sensible to practise this at home.

8. Follow up with a thank you

The last thing to think about is some basic manners; follow the interview up with a thank you email that emphasises your keeness for the role and company. Send this to your recruiter to pass on to the hiring manager at the company but keep it short, sweet and to the point. This is the polite and professional finish to a great application and interview.

What to do next

If you've had a successful interview and have been offered a position, you should be very excited! However, it's not the end of the process. You still have much to consider before you accept or decline a job offer.

Don't act before you've had a chance to take some time to consider the offer. Give the hiring manager a time frame you can stick to and speak with your recruitment consultant if you have one. Once you make your final decision, you should let the hiring manager or your recruiter know as soon as possible.

If you decide to accept the position, remember that realistic negotiations are part of the process, so explore the possibility of any potential movement on salary and benefits. Make sure you read your offer details thoroughly and confirm everything via email so that you have a written record.

Finally, be excited! This is the first step in your career. Convey this excitement to the hiring manager to further underline that they have made the right decision.

If you follow the tips outlined here, you could well be on your way to securing your first job in Architectural Technology.

The School of Biophilia

Words by Amelia Chasey MCIAT, Chartered Architectural Technologist

Having graduated from University of Central Lancashire with a first class honours degree in Architectural Technology in 2016, I have since explored the relationship between architecture and well-being.

I went on to receive a Masters in Arts Health which focused on the application of an art form – architecture – and how it supports better health and well-being.

During my time studying, I faced an unexpected battle with my own health and well-being, after a serious fall as a gymnast left me reliant on daily pain relief and a walking stick. It was only when I was truly faced with pain and physical discomfort that I began to understand the real impact the built environment has on its users, and I wanted to make a change!

That experience led me to discover Biophilia. At its core, Biophilia is humanity's innate need to connect with nature. It's more than just enjoying a walk in the park – it's a fundamental part of our physical, emotional, and cognitive well-being. Research shows that integrating natural elements into our environments – be it schools, offices, or homes – can improve creativity, focus, and happiness. Yet, as urbanisation and screen time grow, many of us are losing touch with this essential bond.

> "Biophilia isn't just for students – it's a philiosophy for life. We examine the benefits of integrating natural elements into our daily lives."

From this, Ann Vanner FCIAT and I launched The School of Biophilia. We believe in the transformative power of connecting with the natural world. As Chartered Architectural Technologists, we are driven to incorporate nature and biophilic design early in the design process whilst also considering other factors such as sustainable and restorative design. We believe that the built environment should energise, inspire, and support its users, not degrade us.

Below are some of our key themes:

1. Biophilia in primary education: Nurturing curiosity early
Children are naturally drawn to the wonders of nature, making primary education the perfect stage to foster this connection. In our first themed week, we'll discuss how outdoor learning, natural materials in classrooms, and even small shifts like adding plans can make a big difference in young learners' development.

2. Secondary and higher education: Deepening understanding
As students grow older, education becomes more about preparing for the future – and biophilia has a role to play here too. We will explore how secondary schools and universities can use biophilic principles to reduce stress and increase engagement. From green rooftops on campuses to incorporating environmental science into the core curriculum, there's so much potential to teach students the value of sustainability while supoorting their academic and mental health.

3. Professional development and workplaces: A lifelong impact
Biophilia isn't just for students – it's a philosophy for life. We'll examine how professionals and organisations can benefit from integrating natural elements into their daily lives. Discover how biophilic design in offices improves productivity and well-being and how professional training can inspire leaders to embed sustainability into their industries. Whether you're an educator, Architectural Technology professional, or business leader, we'll show you how the principles of biophilia can be a game-changer.

We want to explore why biophilic education matters in primary education, emphasising its role in fostering curiosity, creativity, emotional resilience, and a lifelong appreciation for the environment.

Cognitive and academic growth through nature
Biophilic learning enhances cognitive development by engaging children in hands-on activities like gardening and nature-based problem-solving. These experiencs make abstract concepts tangible and memorable.

Emotional well-being and mindfulness
Exposure to nature reduces stress, increases emotional resilience, and teaches mindfulness. Activities like forest walks and outdoor meditation provide children with tools to manage their emotions effectively.

Fostering creativity and curiosity
Using natural materials for art and open-ended play encourages imaginative thinking and a sense of wonder, helping students develop a natural inclination to explore and learn.

Environmental stewardship and responsibility
Early interaction with nature fosters a sense of responsibility toward the planet. By participating in eco-projects, children learn about sustainability and the importance of caring for the world around them.

Holistic learning environments
Blending outdoor and traditional classroom education creates a dynamic, engaging environment where children thrive academically and socially. Biophilic learning transforms the educational experience, especially for primary school students. By weaving nature into the curriculum, we create opportunities for children to grow cognitively, emotionally, and socially. This approach instils a sense of curiosity, creativity, and responsibility, laying the groundwork for well-rounded individuals who value the environment. Primary students shouldn't just learn about the world – they learn with the world, forming connections that last a lifetime. Biophilic education is more than an academic strategy; it's a movement toward nurturing happier, healthier, and more inspired learners.

In April, we launched The School of Biophilia playbook which introduces us and what we do. **Click here** to visit our website.

Moving forward, we will be releasing content via our website and social media platforms for teachers, professionals and parents on how to incorporate nature into education and at home. We also offer workshops to schools and other educational providers.

Please follow us on **Instagram** and **LinkedIn** or sign up to our newsletter **here**!

The story of Detail Library, and an exciting opportunity for CIAT membership

Words by Emma Walshaw, Founder, Detail Library

Studying architectural disciplines can be hard. There are so many skills to pick up and so many different topics to learn... it's just a mass of information to soak up.

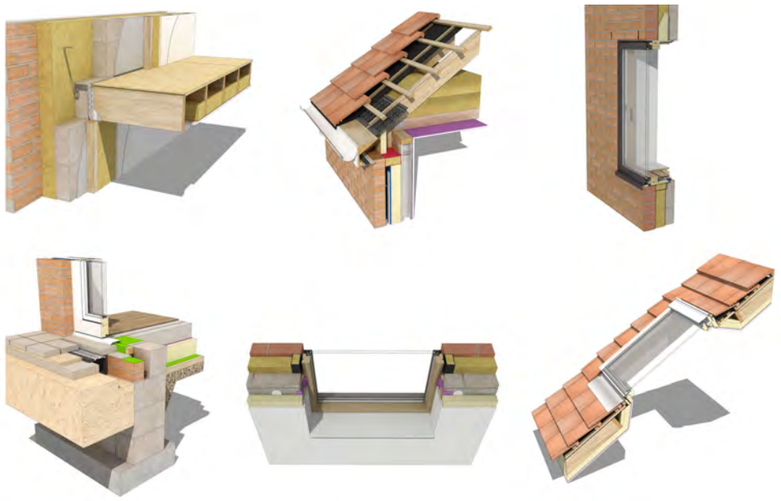
As an Architectural Technology student at Sheffield Hallam, Emma Walshaw was keen to really get to grips with the technical aspects of the course. Despite spending hours in the library researching theories, she struggled to find examples of details to help explain them in her textbooks. Fast forward several years and Emma has corrected that course and filled that gap through providing students and professionals access to detailing resources that help them succeed both in their studies and in practice.

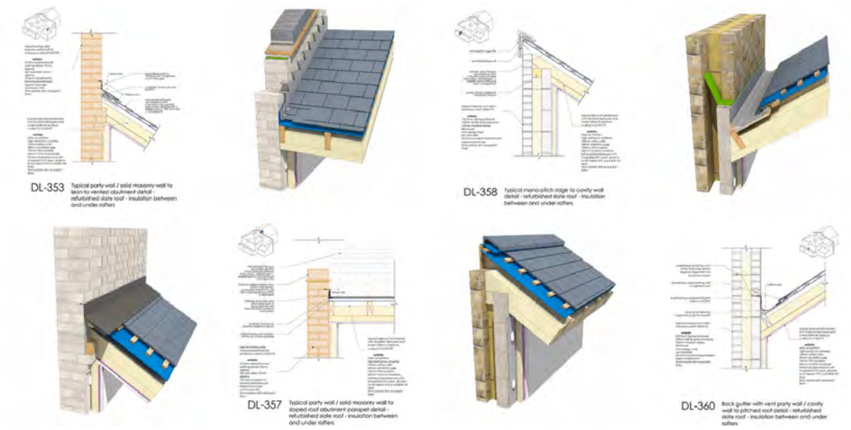
How it all started – First in Architecture and the books
Emma set up First in Architecture back in 2012, with the main goal of helping other students. At that time there were very few online resources dedicated to helping students, so Emma dedicated her spare time to sharing what she was learning while she worked in practice. She would spend her evenings after work writing guides for students to help them get the best out of their studies and achieve the best results.

First in Architecture has now grown into much more than just a hints and tips website, with many helpful resources, not only for students but for professionals too.

While Emma was working in practice, she realised it would be useful to put together a set of standard details for use as a starting point on different projects she was working on. She soon realised these would be useful for the First in Architecture audience too. She released the first edition of 'Understanding Architectural Details' and quickly discovered there was a keen need for this kind of content.

Emma has now written seven books, the latest of which is titled House Extensions, which she is co-authoring with Aida Rodriguez-Vega (who produces much of the detailing work for Detail Library).





A new project is born – Detail Library
After the success of the books, Emma wanted to be of more assistance to professionals and new graduates who were working in practice. The obvious step was to create an online resource of construction details that would help Architectural Technologists and architects speed up their workflow and save time, whilst also providing and sharing as much technical content as possible, so that's what she did. Detail Library was launched in 2021.

Construction detailing can be a tricky part of a construction project. There are many factors to consider as you move into technical design. Sometimes, having a base point to start from can save so much of the time spent looking at previous projects for similar details and drawing everything from scratch.

Detail Library contains hundreds of construction details. It started with a small collection of around 100+ details taken from Emma's Understanding Architectural Details books. Since launching, the library has published new details each month. At the time of writing, it contains just under 600 details.

At present, the library is aimed at sole practitioners and small practices that focus on domestic and small scale residential construction. In the future, we plan to expand into more commercial details as well as other resources for ATs and architects.

The details cover different types of construction such as masonry, timber frame, steel frame, and other building assemblies related to small scale residential and domestic construction. There is a strong focus on technical junctions, such as foundation to wall junctions, window details in sections and plans, floor junctions, and wall to roof junctions, along with the many other technical details in between.

In addition to the construction details, Detail Library also features other useful elements. You can find electrical symbols, Part M bathroom layouts and hazard symbols, or download the construction build up template that consists of all the different building assemblies featured on the library. To accompany many of the new details, technical studies and design guides that explore the best practices and key considerations for specific construction types and technical detailing are published regularly. These guides provide insight and background to the details and help with an overall understanding of the approach of a specific junction, material or assembly.

Benefits of using the construction details
The technical design stage of any project can be challenging and time-consuming. Detail Library provides countless resources and construction details to help ATs produce a more streamlined workflow, a knowledge base, and execute their projects more efficiently. Having a library of details to start from saves countless hours of work and research, with every detail easily adaptable to suit your project requirements.

The drawings are produced in line with the Building Regulations and British Standards, as well as using additional guidance from LABC best practice and NHBC best practice. Anyone using the details is encouraged to ensure they carry out their own research and due diligence, adjusting the drawings as required. The details are there to provide a great starting point for your project.

The library's team of Architectural Technologists and architects have years of experience working in different sectors, specialising in many fields from high-end residential to large-scale commercial. Detail Library is constantly striving to improve their service, carrying out detailed research to ensure they produce the most useful content to help ATs and architects with their workflow.

Special discount
Detail Library is delighted to offer all CIAT members and affiliates a discount for membership to the library. Use the code **CIAT15** to get **15% off all annual memberships.**

detail-library.co.uk

My Schindler City Centre tour: the past, the future, and the R.I.S.E system

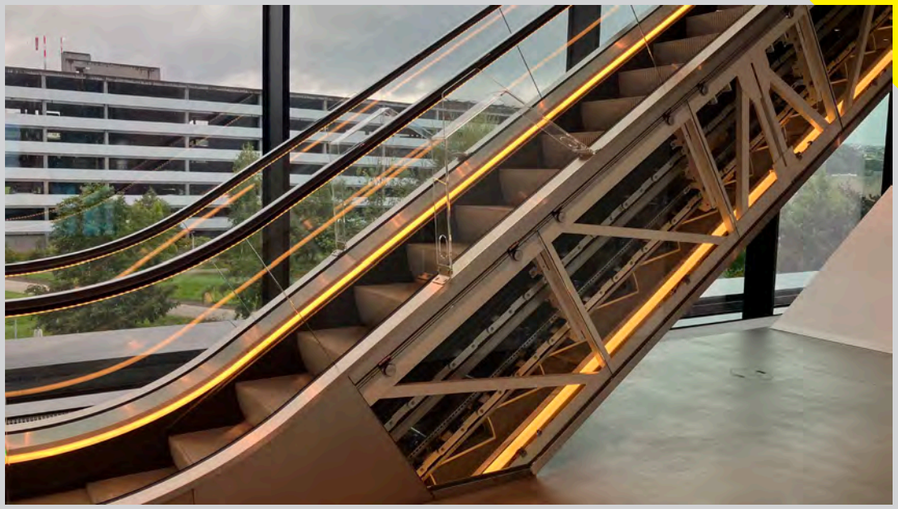
Words by Tim Fraser, Publications Executive, CIAT

For 150 years, Swiss manufacturing company Schindler have been making cities more mobile through their elevators, escalators, and moving walkways, and today they move a staggering two billion people a day.

In October 2024, it was announced they were a TIME's World's Best Company of 2024. After receiving an invite to their Trade Media Day last August, I take a flight to the beautiful city of Lucerne in Switzerland to visit Schindler's impressive Ebikon Campus and see how the multibillion dollar company started, how it operates, and their ambitions for the future.

The first item on the agenda is the Schindler City Centre Tour: an interactive exhibition that takes us through the history of the company. After catching an escalator with projections of skyscrapers and hustle-and-bustle city sounds all around us that aim to transport us to the imagined "Schindler City", we are greeted by a ginormous, abstract model city comprised of buildings around the world in which Schindler's lifts operate. Scanning certain buildings with an iPad brings information about them and the sheer number of lifts each of them have in operation, as little red augmented reality lifts move up and down them on the screen. Also in the room is a timeline of the company's history, and, under glass, antique hydraulics and other parts of Schindler's old elevators (sure to interest those more mechanically minded ATs).

Elsewhere, we see a closer look at one of the company's very first lifts, right next to a modern and innovative design for a modern skyscraper that is two lifts on top of each other, as well as a fascinating look inside an escalator – we can literally see the gears turning. The tour ends with the tour group tapping an interactive table to design our city of



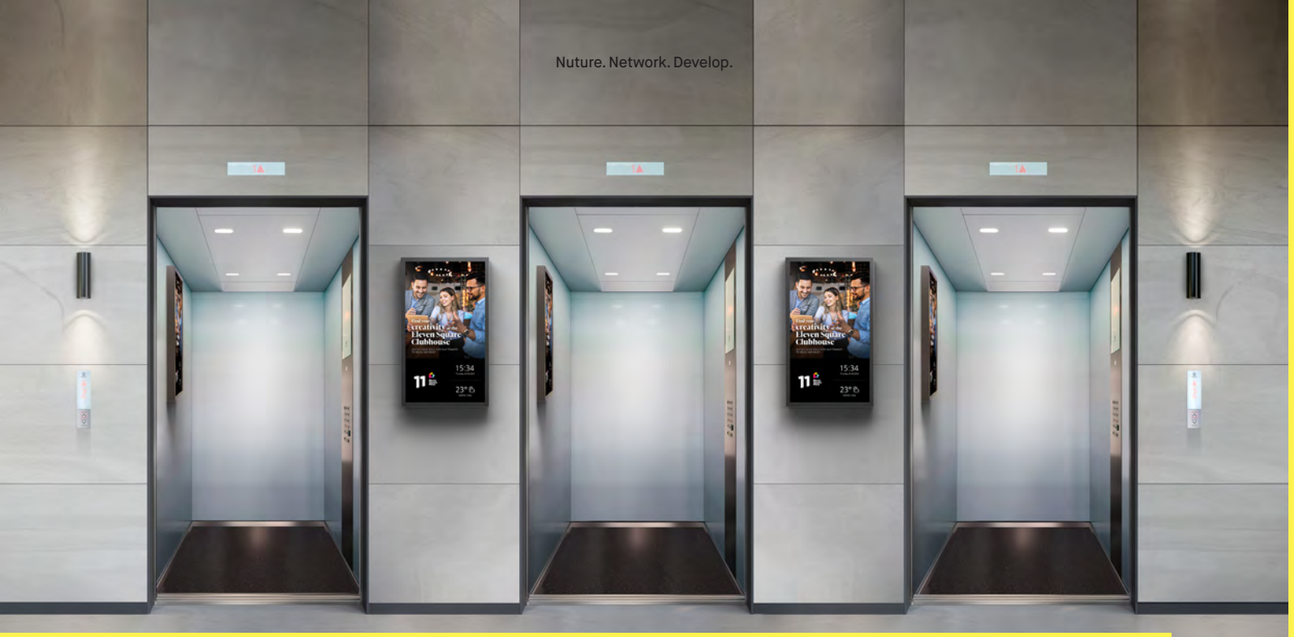
the future – a dazzling display of lights and sound. This emphasis placed on the future would be further explored later in the day, during my visit to the "PORT Innovation Lab", which you can read about on the following page.

Speaking of the future, the most interesting part of the tour for the technologist in my eyes is the close look we get at Schindler R.I.S.E – or the Robotic Installation System for Elevators. R.I.S.E is the world's first self-climbing, autonomous robotic installation system for elevators. A large rectangle held by pulleys, it has a multi-jointed robot arm at its base that drills and sets the anchor bolts required for landing doors, divider beams and wall brackets. Not only this but it also scans for obstacles in its way, determines rebar locations and travels from floor to floor, all completely autonomously. All the construction team need to do is the on-site loading, as well as the transporting to and suspension into the elevator shaft. There is also a wireless user interface for the operator, with statistics and information from the robot's work, all remotely monitored.

My informative and friendly tour guide Rolf Schwerzmann, who is also Global Account Manager, informs me use of R.I.S.E will massively increase safety and efficiency on construction sites in the future. On the safety side, well, the robot handles repetitive and physically draining tasks for workers, reduces the time they spend in elevator shafts, and limits their exposure to hazards, construction noise, vibration, and dust. In terms of efficiency, the robot can work round the clock and has set a new standard for lift system installation speed.

But if a robot can work more efficiently than a human, will widespread use of R.I.S.E – as is Schindler's plan – potentially put construction professionals out of the job in the future? Schindler do not seem worried about that, believing that new technologies will always make the sector more appealing, which will help to attract and retain talents. And demand means buildings are growing taller and wider, and much faster, so talented people will always be needed.

Schindler R.I.S.E has been successfully deployed on numerous construction sites around the world and, I am told, now has its first gig in London, on a brand new skyscraper.



The future is elevated: A look inside Schindler's innovative new designs and how they might usher in a brighter future for our cities

Words by Tim Fraser, Publications Executive, CIAT

Schindler are keen for their ambitions to be known. Their PORT Innovation Lab – a 90-minute multimedia journey taking place in a cinema, demonstration room, and planetarium – showcases the company's cutting edge new technology and illustrates the revolutionary ways a simple system could shape the future of the urban environment. By the end of the presentation, it was hard not to be convinced that Schindler's designs might change our cities forever.

This system is Schindler's MetaCore, which looks to use their PORT destination control technology to usher in a more sustainable, accessible future, with affordability in mind, tackling both the housing crisis and the climate disaster. With the Paris Agreement's bold but necessary aim of reaching net zero by 2050 looming large, and with a predicted 80% of the buildings that will make up our cities by then ones that are already built, Schindler are aware of the increasing importance of retrofitting and repurposing. With more people working from home and less office space being filled, skyscrapers in our modern cities are increasingly becoming akin to film props: great to look at, but hollow inside.

The solution, then, appears to be to retrofit these high rise buildings to make them more than offices, with some floors being offices, others apartments; others perhaps gyms,

laundrettes, whatever is needed. But, when it comes to elevators and mobility, some major issues come up when we start thinking along those lines. The first is about cost. If you have two sets of users – residents and office-users – you need two sets of elevators, don't you? To repurpose a building dozens of stories tall to accommodate for multiple elevator lines is a costly and long process. Or if you cut the corner and have one set of lifts, you will have a lot of dissatisfied users: imagine an entrepreneur trying to impress an external stakeholder having to share a lift with a resident taking their dog for a walk, or residents waiting ages for and then having to share a cramped lift with the morning commute when all they wanted to do was go for a brisk jog.

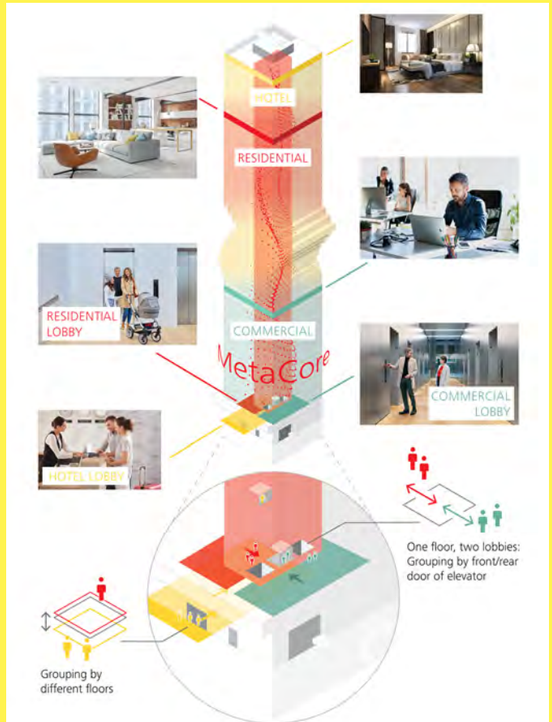
MetaCore's goal is to solve these issues by utilising innovations in their PORT destinaton control technology to negate the issues of having one set of lifts, providing an adaptable passenger experience that enables buildings to be repurposed, and their functionality reconfigured not just once, but endlessly, extending their lifespan immeasurably.

Their PORT tech, when first developed, allowed users to tap in their preferred floor when calling a lift. Modern innovations take things several steps further. Let's say you are a resident, entering through the lobby. To get into the building, you beep through a gate, using an app or simply Bluetooth. The system instantly assigns you a lift to your floor, shown on a display screen at the gate ("Go to Lift A", say), knowing through using a digital twin and tracking everyone in the building how to keep congestion to a minimum and ensure you only ever share a lift with other residents, not workers. With this new technology, "we end the century-old concept of one elevator group per group of passengers," says Group Head of Transit Management and Digital Ecosystems, Florian Troesch, giving Architectural Technologists, "an urgently needed tool to make cities more flexible in the future."

The system knows a resident is getting into the elevator, and so lights it with warmer, more homely lights than with its worker bees. That is not all though. I was impressed by the options presented to me by their Digital Media Services team, which turns elevators into communication platforms with on-screen displays. As a resident, you might see weather updates, community events, or resident notices here. As an officer worker, you might see stocks and shares, canteen menus, or perhaps your calendar reminding you of upcoming meetings. I also saw their multimedia SmartMirror, which projected these same displays but with the incredibly cool double functionality of also being a mirror. This gives the displays a 3D holographic feel, making it really feel like a lift from the future. This would not be the only time in my day at Schindler I felt their technology was transporting me into the future, and as I saw a demonstration of the next part of the MetaCore user's process, I was blown away. Sensor doors that slide open have long been a staple of science fiction, but with Schindler's new prototype, they are now a reality. Blending in seamlessly with the wall, they open using Bluetooth sensors, with the front and back sides being two panels that push into each other and then slide into the side of the wall. If this prototype ends up becoming a common feature of future buildings and renovations, which I suspect it will, Architectural Technologists will have a freedom in not having to account for the swing of a large door when drawing up their room plans.

If you were thinking, "what is a lift company doing designing sci-fi front doors to apartments?", the MetaCore team at Schindler have anticipated your question. Lifts and escalators are all about mobility and accessibility, and this technology is, according to Michael Guarisco, Business Development Manager of the PORT Innovation Lab, "a revolution in mobility", bringing indoor mobility "to a totally new level". A resident could get from outside the building to inside their flat without lifting a finger, allowing those with mobility issues easy access and doing away with door handles forever.

The Bluetooth-paired functionality also allows more futuristic innovations, such as letting non-humans in. If you have a Bluetooth-enabled collar for your cat, for example, as an animation displayed for me, the door would be programmed to open just a crack when he approaches, allowing him through but not leaving your door wide open for intruders.



Schindler MetaCore

In fact, there would also be an alarm system set further up the door, so burglars couldn't take your cat and use him to slip through the crack and get into your home. I don't know what would happen if your cat likes to jump through the door, or if your Bluetooth disconnects from the collar, but as this is still at prototype stage they have plenty of time to fine tune it. I was impressed at the no-stone-unturned attitude towards making this an efficient and hands-free way of accessing a modern home.

As if that wasn't enough, when Guarisco showed me the prototype in action, I watched the door slide open in front of me and a service robot roll out, ready to operate. (As I said, it was hard not to feel like I'd been transported into the future.) I could imagine the leaps forward in housekeeping efficiency this could create for large hotels and high rises that have a lot of rooms to keep clean and tidy. What this would mean for those working in housekeeping as cleaners and custodians, on the other hand, is a potentially scary thought, though I got the sense that Schindler are thinking a lot further than the immediate future here.

All this future-focussed futureproofing and innovation led to their final coupe de grace: Schindler's ambition to use this technology to build the "vertical village". As the cinema screen displaying the introductory video to this concept moved across the room, shrinking and revealing a wide-open hall ahead, I saw in front of me a planetarium – dazzlingly lit up to look like Earth itself.

Inside the planetarium I was shown a video of a building complex going up and up and up, with vast green spaces, children playing in playgrounds 50 feet in the air, and towers built upon towers upon towers. This is Schindler's true vision for the future. It is the world in a single skyscraper, life in a high rise relinquished of the isolation and coldness it can bring, with an ever-present focus on community, connection, and nature. Being immersed in a screen that encompasses your whole vision is known to be overwhelming, but as I felt myself travel up and up this building that seemed to have no end, I wondered for a moment whether this is the utopic solution Schindler want it to be or whether it is more akin to what J.G. Ballard was warning us about in his novel *High-Rise* that sees a community lose touch with life outside their high rise building, with disastrous results. But when I switch off my doomer brain, I remember that throughout the presentation, the Schindler MetaCore team showed a deep consideration for the well-being of residents; it was at the heart of their thought process when dreaming up these game-changing designs.

In these modern times, as the presence of imminent climate disaster looms ever larger, Schindler is offering the cities of the future cutting edge technology that puts mental wellbeing and sustainability first. This is commitment to sustainability on a grand and admirably far-reaching scale. Though the height of Schindler's ambition for the vertical city might be too far in the future to comprehend, MetaCore focusses on innovative sustainable solutions to our most pressing problems, with tech that could help put an end to the housing crisis, help us reach net zero, and fight back against climate disaster.

It's clear that, for this world-class elevator company, the future is looking up. "We really believe that, in the same way that the elevator has enabled the cities of today," concludes Troesch, "MetaCore will enable the cities of the future."

elementalLONDON: Making buildings perform better

Words by elementalLONDON

Our new event **elementalLONDON** has a simple aim at its heart: how to make buildings perform better – whether that be in terms of energy use, carbon footprint, materials use or occupant wellbeing.

elementalLONDON, the latest launch from the team behind the successful InstallerSHOW, builds on the success of the elemental digital platform, which delivers news, views and technology solutions on reaching net zero to its audience of built environment professionals.

The show at ExCeL London on 19-20 November takes the ethos of 'advancing the efficiency of buildings' and will combine innovation, debate and networking. Alongside a host of exhibitors, elementalLONDON will feature no fewer than five different content areas, with seminars and debates on all the major issues facing those tasked with decarbonising buildings, while making them affordable, comfortable and sustainable.

It goes without saying that we want to encourage you, the Architectural Technology community, to provide your expertise and experience, and we have partnered with CIAT to help encourage this. The detailed programme will be issued very shortly, but here are some expected highlights:

- The **elementalARENA** will feature lively debates and interactive sessions on advancing the efficiency of buildings. Speakers will include government ministers, academics and industry leaders covering policy updates, innocation, skills and much more.
- The **Housing Hub** will feature sessions curated by industry partners such as National Retrofit Hub to deliver essential information around social housing, private housebuilding and domestic retrofit.
- The **Climate Solutions Theatre** will host content for those working with heating and cooling in commercial and public buildings. Among the topics here will be: Low Carbon HVAC, the opportunities and challenges for introducing electrification to the commerical and public sector, from big heat pumps and heat recovery to future-proofing AC.

Lucy Dixon, Head of Content, said: "Our content programme will showcase the industry's most influential voices. They'll be sharing insights on creating efficient buildings, with guidance on tackling our existing building stock as well as new projects. Our goal is that every visitor will leave the show feeling inspired and energised to deliver better buildings for their communities."

The show will also focus on training and careers at all levels, from CPD programmes through to apprenticeships and encouraging 'next generation' engagement.

Registration for elementalLONDON is free of charge and opens in July. For more information and to be kept updated on show news and announcements, visit www.elementallondon.show.

CIAT60
60th Anniversary 1965-2025

Fáilte Ireland

MEET IN IRELAND

Celebrating a legacy in Architectural Technology

Come and celebrate with CIAT for its 60th anniversary in Dublin! 21-23 November 2025

To mark our 60th year we are hosting a 60th Anniversary Diamond Celebration in Dublin between 21-23 November 2025. It will be a weekend to remember with networking, the AGM and a special celebratory event.

We hope you'll be able to join us as we reflect and look forward on the remarkable journey that both the Institute and the discipline has had over the past six decades.

Our Future ATs and evening Charity Event

On Friday 21 November, we will start with an event for our student membership, affiliates and academic staff, celebrating and encouraging the future faces of Architectural Technology and all that is yet to be achieved in pushing the discipline and the industry forward.

Students and representatives will be from across the five Accredited programmes in Ireland.

Later that day, CIAT will be hosting a charity event in the heart of Dublin city.

CIAT AGM and Anniversary Gala

On Saturday 22 November, CIAT will host its 2025 AGM. We wrap things up in spectacular fashion with the event everyone has been waiting for: CIAT's 60th Anniversary Celebratory Gala.

Here, guests and sponsors will find drinks, a three course meal, dancing to live music, and the opportunity to network, connect, and cheers to the next 60 years, and beyond.

Book now!

CIAT aspiration

Nurture. Network. Develop.

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