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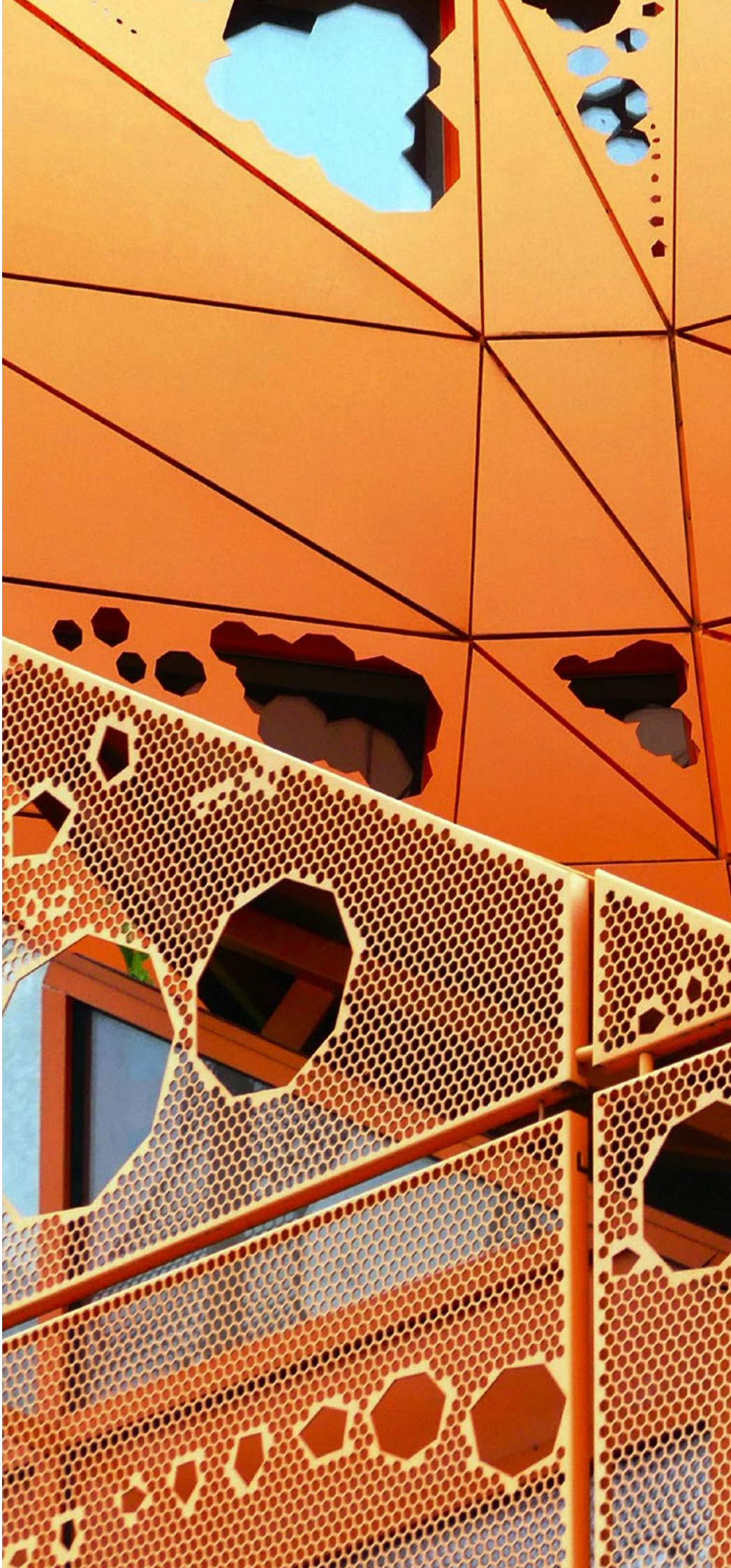
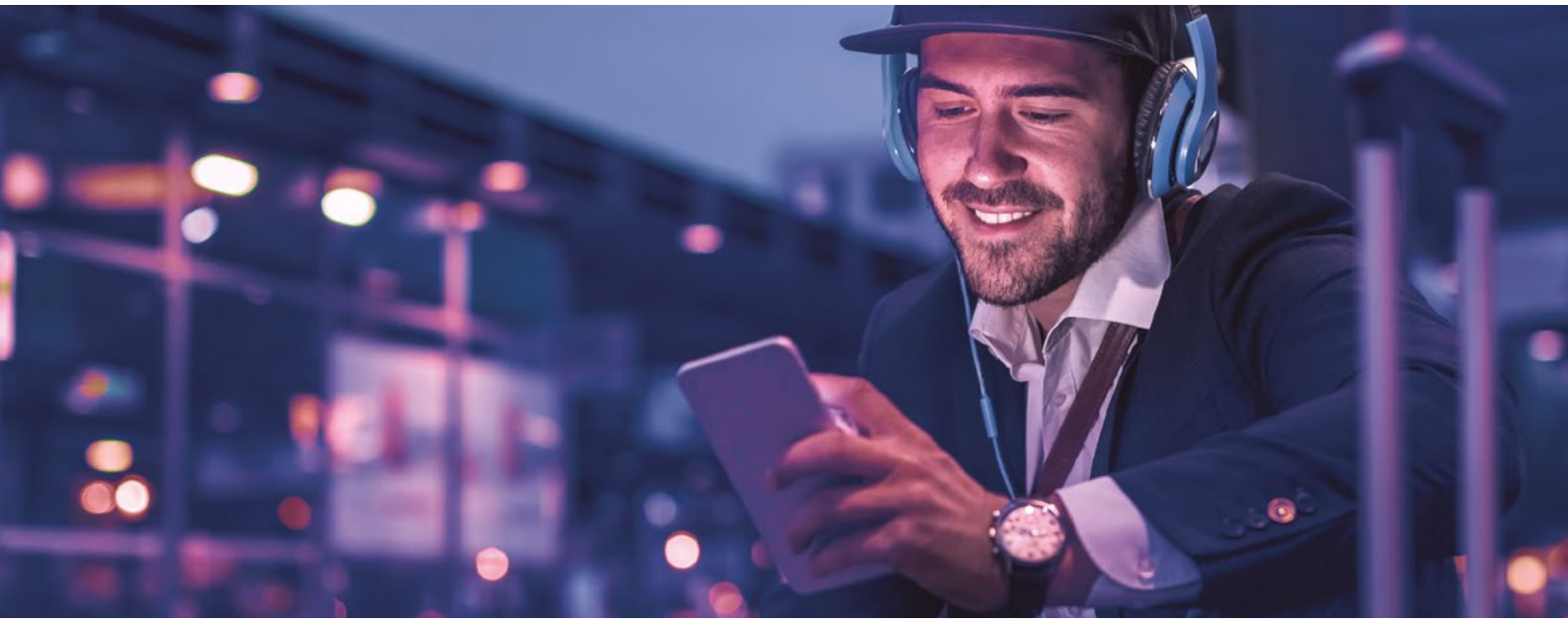


FROM THE CHARTERED INSTITUTE OF ARCHITECTURAL TECHNOLOGISTS
£6.00 – ISSN 1361-326X – ISSUE #152 – WINTER 2024



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Subscriptions
AT Journal is free to all members and affiliates of CIAT. Subscription rate for non-members is £40 (UK) and £50 (overseas) per annum (4 issues) or £6 per issue.

ISSN 1361-326X.

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Editor's welcome

Every year time seems to speed up, but if you can believe it, it's Christmas time already. Welcome to our 2024 winter issue; our final issue of the year.

The end of the year also brings our *Annual Review*, which you can check out on our website now to find out what the Institute has been up to this year and how we've been working to provide the best service possible for our members and affiliates.

Back in August, I visited Swiss elevator company Schindler's Ebikon Campus for their Trade Media Day and learnt about what the industry-leading company is doing and how their plans for the future might impact and influence ATs. Check out my four-page breakdown of the day on page 12.

AI continues to be a hot-button topic in the industry, and in this issue we have two different approaches to it, with Open Data Institute take us through fundamental issues that threaten the AI boom, while SketchUp tell us how AI 3D modelling could help shape the future of the industry. There are also two articles on ventilation, both of which champion the benefits of MVHR systems. On rights and policy, we have two fascinating articles from Carter Jonas on the implications of the removal of the word "beauty" from the NPPF and on lesser-known PD rights that might be useful for ATs to know, as well as a contractor's guide to the Building Safety Act.

There are some exciting opportunities for our members and affiliates in this issue too, including a special discount on membership to Detail Library. Read about that, and about the history of Detail Library and why it could be beneficial to use for your projects, on page 20. This year marks twenty years of Chartered Environmentalists, so there is no better time to become a CIAT CEnv member; go to page 46 to find out more.

Before I go, it is worth mentioning that we have been having an increase in reports of CIAT emails going into Junk Folders, so please do check there for our emails while we work on this problem.

In more exciting news, we are bringing some fresh new developments to the Journal next year, including a regular feature from our Policy Team, and more – so watch this space!

Until then, have a Merry Christmas and a Happy New Year.

Tim Fraser
Deputy Editor

Design for neurodiversity: driving change for the better

Words by Altro

Accessible design, design for neurodiversity, inclusive design – these are not new terms, but seeing them translate into reality in the built environment has been a long time coming and is now climbing up the agenda. As this movement gathers momentum, Altro looks to how and why design for neurodiversity resonates so widely at this point in time and talks to some of the people making a change by demanding the design community do better.

In October 2022, a diverse group of people from all over the world gathered in Manchester at Material Source, for lively discussion on best practices and obstacles in inclusive design and how they can be overcome. At least one project manager left early: "I'm not being rude," he said as he rushed for the door. "I've just realised that the project we're about to sign off on has missed the point, and now I can see how we need to do it differently. If I leave now, I can fix it."

The event, focused on inclusive design and neurodiversity, was hosted by flooring and walling manufacturer Altro, and was one of the early developments in a collaborative passion project that has gathered momentum over the past three years. In November 2023, there was a meeting with a large contingent from a major NHS Trust at Altro's Letchworth HQ.

Around the table were the NHS Trust's Head of Mental Health, Head of Capex Refurb Projects, Facilities Managers and more, here for an open and honest conversation about their buildings and about creating 'places of safety'. Through industry-leading speakers such as Stephanie Kyle of Maber Architects and Maria Luigia Assirelli of Floyd Slaski Architects, they learned of a different way to approach design for neurodiversity, that inclusive design didn't have to cost more if you considered it at the right stage, that meeting building regs simply meant doing the bare minimum, which was not really enough, and that those in charge of building projects had a responsibility – and an opportunity – to do more.

Could it be that finally, we are seeing an appetite for architecture and interiors "by people, for people" that come from an understanding of lived experience and that acknowledge, accept and better still, celebrate, diversity amongst our population? The strength of response from those who have attended Altro's various forums and workshops would suggest that yes, that appetite is there.

Why now? Well in part because of the way in which the message is being delivered. This is personal for the people involved; they care passionately, and that passion is infectious.

As Altro's Social Care Key Account Manager, Joe Hurst understands the importance of inclusive design from many different viewpoints, working with designers, architects, facilities managers, care homes and more. As a parent of an autistic son, he's seen the impact of design decisions play out in real life. "Through Altro's Voice of the Customer programme I had the opportunity to raise questions around design for neurodiversity, to get a conversation started."

This is also personal for Stephanie Kyle, who was diagnosed as autistic in 2020, nearly 15 years after a diagnosis of auditory processing disorder, which presents in a similar way. Her interest was sparked as a child when an architecture company visited her school. They were involved in building a new aquarium in the city. Steph and her classmates visited the completed building, which she describes as "horrific, the worst building ever!".

From here began the start of a special interest in building regulations and design for neurodiversity. "Every project I did at university focused on neurodiversity, on being autistic. I accumulated all this knowledge, reading scientific papers for fun. But then I would speak to people who had been architects for 25 years and find they didn't know the basics about inclusive design, not even accessible toilets. How could this be the case?"

Maria Luigia Assirelli also explored her passion for accessible design as part of her architecture training. An architectural study and dissertation on a rehabilitation centre in Rome led her to a Masters in healthcare design. In 2005,

she met Christopher Beaver of GA Architects, who has been dedicated to designing neurodiverse-friendly buildings since 1996, creating innovative facilities for children with severe learning difficulties. Together, Maria and Christopher conduct seminars and round tables to delve into ways to enhance their designs. Maria describes design for neurodiversity as "a puzzle to put together. I have a logical mind, and I love architecture with a purpose."

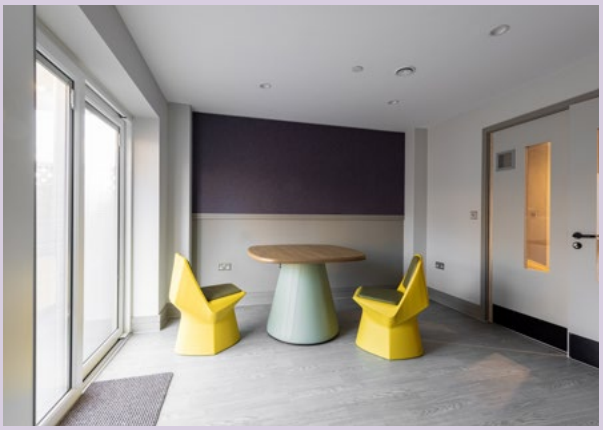
Maria and Steph were just two of the experts brought together by Altro over the past few years for Altro Forum events in Manchester, Letchworth and London. Also involved are Sarah Darwin of PHI Architects who specialises in low energy, Passivhaus projects and designing for special needs and autism and who has shared her experiences as a designer and as a parent to a 21 year-old son with autism, and Professor Anastasios Maragiannis, Professor of Inclusive Design who presented on diversity and inclusion.

Maria believes in the importance of education, and that part of the building design journey should be the obligation to the end user. "User experience should play a major part in architectural education, and in forming guidance and regulations. We have a moral obligation to stand up for something just and not accept second best."

Education is the key factor for Steph, too. "People don't design badly on purpose," she says. "They just don't realise they need to consider, and that changes if we fix the architectural education system, which currently prioritises creative design over functional, accessible design. But you can absolutely have both."

Between 400 and 500 people have taken part in Altro's Forum events, with a further 4,000 taking up Altro's Design for Neurodiversity CPD. "It's an educational journey to engage with people," explains Joe. "This is just the start of helping build better for the future; we're in the infancy of raising awareness. We can't educate everyone on our own, we need to work together." ■

This is personal for the people involved; they care passionately, and that passion is infectious.



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Six reasons you should be using MVHR systems

Words by Paul Williams, Product Manager, Domus Ventilation

Valued at $106.69 million in 2022, the Mechanical Ventilation Heat Recovery (MVHR) UK market is predicted to reach $235.34 million by 2030, with an annual growth rate of 10.73% from 2024 to 2030. This extraordinary growth is being driven by increased awareness of the benefits of MVHR, as well as the adoption of these systems to comply with the latest uplift to Building Regulations.

MVHR systems take a whole-house approach to ventilation, combining supply and extract ventilation into one system. They extract the stale air from wet rooms (kitchens, bathrooms, utility spaces) via ducting, transferring its heat to the fresh air being drawn into the building through heat exchanger. The filtered, pre-warmed air is then distributed around the home.

MVHR systems are a modern response to modern building practices. With ATs leading the charge to make properties more airtight and energy efficient, it is vital that good ventilation is designed into properties at the outset. If you are yet to be sold on these ventilation systems, allow me to present to you these key benefits:

1.Health

In the UK, we're not an outdoors type of nation. In fact, we spend 80-90% of our time indoors. The air that we breath indoors is therefore just as, if not more, important than the air we breathe outdoors, yet indoor air pollution can be up to five times higher than external. Sources of indoor air pollution are widespread and vary dramatically from house to house, but include cooking, cleaning products, furniture and outdoor emissions entering our homes. Then, of course, you have condensation and, in worst case scenarios, mould to contend with in the winter months.

Poor indoor air quality has been linked to an increased risk of respiratory and cardiovascular illness, cognitive impairment and certain cancers. England's Chief Medical Officers Annual Report 2022 Air Pollution stated: "A better understanding of how we can prevent and reduce indoor air pollution should now be a priority". It also noted "The role of ventilation is central to reducing unavoidable indoor air pollution." MVHR systems are the most effective ventilation method for our homes as they both extract stale air and

supply filtered 'fresh' air to key rooms, such as bedrooms.

In urban areas that have high pollution levels, a NOX or PM2.5 pre-filter can be fitted in to the supply leg of an MVHR duct system to filter potentially dangerous pollutants from entering the home. Domus Ventilation's NOX-FILT, for example, is highly effective as it prevents up to 99.5% of NO^2 pollution from entering. Other steps that can be taken, as recommended in Building Regulations, include placing intake grilles away from the direct impact of the sources of local pollution. Areas in which urban traffic is the main source of that pollution, the air intakes should be as high as possible and located on the less polluted side of the building. Ventilation intakes should not be placed in courtyards or enclosed urban spaces where air pollutants are discharged.

2. Comfort

As we all know, breathing in poor quality air is not only unhealthy, it's unpleasant. As stale air is usually the result of a buildup of chemicals (especially VOCs) and humidity, our homes feel stuffy and can have an unpleasant smell. Ironically, using an air freshener to combat this simply adds to the chemical concoction. MVHR systems are continuously on, removing that stale, humid air and its undesirable odours. During colder months they take the chill out of the supply air by passing it through a heat exchanger where the outgoing air's energy is extracted and transferred. In the summer months, a 100% thermal bypass automatically activates when the air temperature reaches a pre-set level, allowing in cooler, fresh, filtered air without warming it through the heat exchanger.

3. Energy efficiency

By reusing the outgoing air's heat to temper the incoming air, MVHR systems help reduce the home's heating load too, with the Centre for Sustainable Energy estimating heating costs can be reduced by around 25%. Whilst MVHR running costs are dependent on the property size, building fabric, and occupant lifestyle, they are inexpensive to run. To ensure maximum energy efficiency is gained from an MVHR system though, it is important to correctly size, install and commission the unit, and use good quality ducting that is designed to work as part of that system.

4. Structural integrity

Whilst VOCs are unlikely to impact a building's structure, persistent damp and mould can. If not dealt with, trapped condensation can lead to timber decay and can have a detrimental effect on insulation. More often though, it leads to mould growth on surfaces of walls and furniture. Removing large areas of mould is not easy and can be costly, especially when redecorating is required and furniture has to be replaced, with the mould likely to return as the source hasn't been addressed. MVHR systems not only remove pollutants from homes, but also the humidity, reducing levels of condensation and preventing mould from forming in the first place.

5. Building Regulations

After changes to Building Regulations in June 2022, minimum ventilation rates have increased across all sizes of properties, reflecting the concern that previous ventilation levels were insufficient to reach all parts of a home (especially bedrooms overnight if doors are kept shut). In the case of larger properties, that increase is substantial. A five bedroom home, for example, has seen the minimum ventilation rate go from 29 to 43 litres per second. To achieve these new ventilation rates, mechanical ventilation systems such as MVHRs are the most proficient option. In larger properties, they are the only option!

6. Value-add

Thanks to campaign groups, scientists, and health professionals raising awareness, along with some high profile tragic cases where two children have died – one from air pollution and the other from mould in his home – the general public are more aware than ever of the importance of good air quality. Stories of extreme overheating in properties located in urban heat islands are also making national news. MVHR systems are an attractive proposition to home buyers who are worried about safety, providing them with good indoor air quality, added comfort and energy efficiency. ■

A Contractor's Guide to the Building Safety Act

Words by Tony Lawther, Managing Director, BriggsAmasco

The Building Safety Act, which became law in April 2022, is the foundation of a new building safety regime for the construction sector. A significant amount of secondary legislation has since been introduced, together with supporting industry guidance.

Following the tragic Grenfell Tower fire in June 2017, Dame Judith Hackitt was appointed by the UK Government to undertake an independent review of the Building Regulations and fire safety. It focused on the regulations' application to high-rise residential buildings. Published in 2018, Dame Judith's final report: *Building a Safer Future: Independent Review of Building Regulations and Fire Safety*, set out the need for the industry to undergo a cultural shift to embed "systemic change" in support of the delivery of safer buildings.

We need to adopt a very different approach to the regulatory framework covering the design, construction and maintenance of high-rise residential buildings. It needs to recognise the complexity of high-rise buildings, as well as acknowledge that their integrity can be compromised due to the involvement of many different agencies.

- Building Safety Regulator, to oversee the safety and standards of all buildings.
- National Regulator, for Construction Projects to oversee and enforce a more effective regulatory regime for construction products.
- New Homes Ombudsman, to enable owners of new-build homes to raise complaints.

The Act defines new responsibilities:

- Accountable persons have a range of duties in relation to relevant occupied higher-risk buildings to ensure safety risks are managed and residents' concerns are addressed.
- Building owners, landlords and developers are required to pay for the remediation of historic safety defects and may need to pay the Building Safety Levy on new residential projects.
- And duty-holders are required to manage building safety risks during the design and construction of all buildings.

The Act introduces new systems as well:

- Building Control will become a new regulated profession.
- Competence is required of all individuals appointed to work on projects, and organisations must demonstrate they have the right organisational capability.
- Gateways are "decision" points at three key stages of a higher-risk building: before planning permission is granted, before building work can begin, and before a building can be occupied.
- A Golden Thread of Information must be created, stored digitally, and updated throughout the lifecycle of a higher-risk building.
- Mandatory and Voluntary Occurrence Reporting to the Building Safety Regulator of fire and structural safety occurrences in buildings that could cause a significant risk to life safety.

The Building Safety Act will establish a stronger regulatory framework for construction products through secondary legislation. The Office for Product Safety and Standards (OPSS), which regulates a wide range of products, has extended its remit to take on responsibility as the National Regulator for Construction Products.

The OPSS, together with local Trading Standards, has powers to enter business premises, inspect and test goods and equipment, and examine documents. As a regulator for construction products, the OPSS aims to deliver safer construction products, better buildings, and improved protection for people and communities, as well as confidence and growth in the construction products market through effective regulation and enforcement.

The Building Safety Act was a long time in the making, involving months and years of consultation between construction and government stakeholders. But regulating for safer buildings is one thing, ensuring compliance is quite another. It is the duty of construction industry stakeholders to show vigilance in adhering to the legislation – a crucial step in the direction of safer, higher quality new buildings. ■

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

Words by Tim Fraser, Deputy Editor

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, it was announced they were a TIME's World's Best Company of 2024. After receiving an invite to their Trade Media Day in 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, Deputy Editor

Schindler are keen for their ambitions 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 percent 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 that 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 his 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 destination 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 office 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.

Sensor doors that slide open have long been a staple of science fiction, but with Schindler's new prototype, they are now a reality.

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. 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." ■

Shortage of high-quality data and other fundamental issues threatening the AI boom

Words by the Open Data Institute

The Open Data Institute (ODI)'s latest white paper, 'Building a better future with data and AI' is based on research carried out by the Institute in the first half of 2024. It identifies significant weaknesses in the UK's tech infrastructure that threaten the predicted potential gains – for people, society, and the economy – from the AI boom. It also outlines the ODI's recommendations for creating diverse, fair data-centric AI.

Based on its research, the ODI is calling for the new government to take five actions that will allow the UK to benefit from the opportunities presented by AI while mitigating potential harms:

1. **Ensure broad access** to high-quality, well-governed public and private sector data to foster a diverse, competitive AI market.
2. **Enforce data protection** and **labour rights** in the data supply chain.
3. **Empower people to have more of a say** in the sharing and use of data for AI.
4. **Update our intellectual property regime** to ensure AI models are trained in ways that prioritise trust and the empowerment of stakeholders.
5. **Increase transparency** around the data used to train high-risk AI models.

The ODI's white paper argues that the potential for emerging AI technologies to transform industries such as diagnostics and personalised education shows great promise. Yet significant challenges and risks are attached to widescale adoption, including – in the case of generative AI – reliance on a handful of machine learning datasets that ODI research has shown lack robust governance frameworks. This poses significant risks to both adoption and deployment, as inadequate data governance can lead to biases and unethical practices, undermining the trust and reliability of AI applications in critical areas such as healthcare, finance, and public services. These risks are exacerbated by a lack of transparency that is hampering efforts to address biases, remove harmful content, and ensure compliance with legal standards. To provide a clearer picture of how data transparency varies across different types of system providers, the ODI is developing a new 'AI data transparency index'.

Sir Nigel Shadbolt, Executive Chair & Co-founder of the ODI, said, "If the UK is to benefit from the extraordinary opportunities presented by AI, the Government must look beyond the hype and attend to the fundamentals of a robust data ecosystem built on sound governance and ethical foundations. We must build a trustworthy data infrastructure for AI because the feedstock of high-quality AI is high-quality data. The UK has the opportunity to build better data governance systems for AI that ensure we are best placed to take advantage of technological innovations and create economic and social value whilst guarding against potential risks."

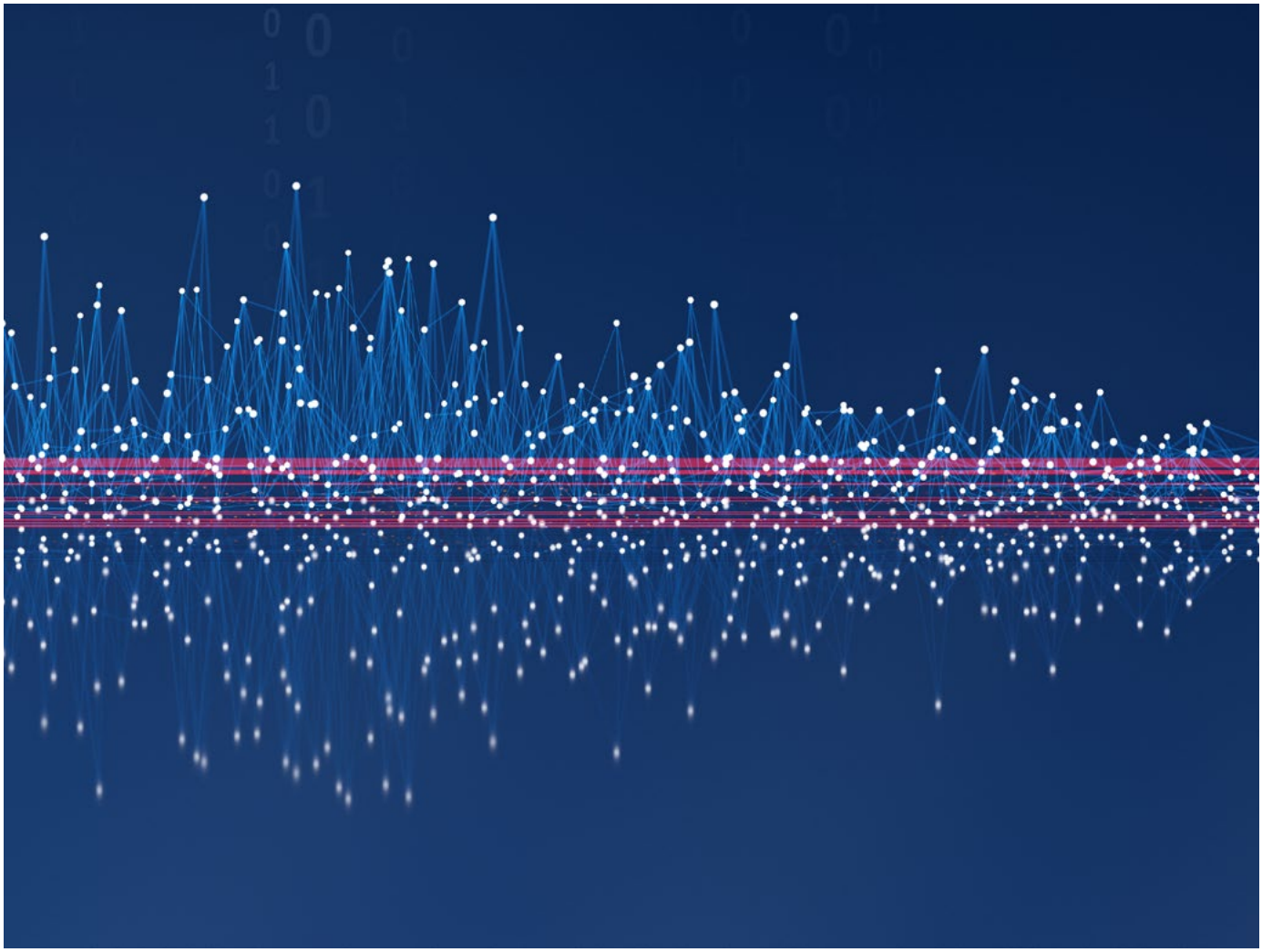
Before the General Election, Labour's Manifesto outlined plans for a National Data Library to bring together existing research programmes and help deliver data-enabled public services. But the ODI says that first we need to ensure the data is AI-ready. As well as being accessible and trustworthy, data must meet agreed standards, which require a data assurance and quality assessment infrastructure. The ODI's recent research has found that currently – with a few exceptions – AI training datasets typically lack robust governance measures throughout the AI life cycle, posing safety, security, trust, and ethical challenges related to data protection and fair labour practices. These are issues that need to be addressed if the Government is to make good on its plans.

The ODI's research found that the public need safeguarding against the risk of personal data being used illegally to train AI models. Steps must be taken to address the ongoing risks of generative AI models inadvertently leaking personal data through clever prompting by users. Solid and other Privacy-Enhancing Technologies (PETs) have great potential to help protect people's rights and privacy as AIs become more prevalent. Key transparency information about data sources, copyright, and inclusion of personal information and more is also rarely included by systems flagged within the Partnership for AI's AI Incidents Database.

Other insights from the research include that intellectual property law must be urgently updated to protect the UK's creative industries from unethical AI model training practices, that legislation safeguarding labour rights will be vital to the UK's AI Safety agenda, and that the rising price of high-quality AI training data excludes potential innovators like small businesses and academia.

AI training datasets typically lack robust governance measures throughout the AI life cycle, posing safety, security, trust, and ethical challenges related to data protection and fair labour practices.

In the next phase of this work, the ODI will investigate designing and implementing strategies for overcoming risks and maximising the benefits of new AI technologies. We will also continue to foster partnerships that enable impactful AI innovation. The Open Data Institute looks forward to working together to create a robust data ecosystem that maximises the benefits of AI for all. ■



Preparing for the future: how specifiers can lead the way

Words by Richard Bateman, Product Manager, RWC

As the construction industry prepares for updated home and building efficiency standards, specifiers have an important role in shaping homes of the future. But what will be the key elements of the anticipated Future Homes Standard? And how do we guarantee effective specification in meeting regulations, as well as long-term reliability, efficiency, and ease of maintenance?

As part of the UK's net-zero strategy, the construction industry has experienced several changes in recent years; namely the updates to Part L of the Building Regulations, which have placed a greater emphasis on efficiency. These changes are thought to be paving the way for the introduction of overarching home and building efficiency standards – including the Future Homes Standard (FHS), which is currently expected to launch next year. While the new Government reviews the feedback and proposals from the Future Homes Standard consultation carried out in 2023, it has outlined its commitment to supporting the need for low carbon homes.

Should the updated standards be introduced in 2025 as anticipated, the FHS will establish new standards for energy efficiency and sustainability in homes – from traditional homes through to apartments – playing a significant role in their decarbonisation by prioritising heating, hot water systems and reducing waste. To make this possible, the choice of plumbing and heating materials has become more critical than ever.

Specifiers, through careful consideration and planning, will take a leading role in ensuring these systems not only meet the new regulations but also provide reliable, high-quality performance for years to come.

When navigating regulatory requirements for new build homes, specifiers must consider a number of factors to ensure compliance and optimal performance. This includes:

1. Temperature. Under Part L, wet central heating systems must operate at a maximum temperature of 55°C to enhance efficiency, reduce energy consumption, and meet the stringent standards of the FHS. Additionally, for larger spaces (150m^2 or more), time controls are mandatory to manage heating schedules better, ensuring energy is only used when needed.

2. Pipework. The pipework that feeds plumbing and heating systems can directly support efficiency and even help to reduce waste. By carefully planning the layout of pipework and specifying suitable materials, including plastic pipes and fittings, it is possible to reduce the potential for leaks and deliver the foundations for efficient performance. Part L also mandates that all pipework, whether running beneath floors or through walls, must be properly insulated to prevent heat loss and further improve efficiency.

3. Renewable heat sources. Through the FHS, the phasing out of gas boilers is becoming a reality, with the focus for heat sources firmly on renewables such as heat pumps. For specifiers, this means careful consideration of system compatibility and sizing, particularly in ensuring that heat pumps and other renewable systems can efficiently meet the heating demands of the property. Here, pairing heat pumps with underfloor heating systems can make a significant contribution towards the efficiency of new homes.

As the FHS sets new benchmarks for energy efficiency and sustainability in new builds, there are other considerations in building design where valves play an important role in safeguarding users, reducing water usage or preventing backflow contamination. With health and safety and efficiency becoming more of a focus in modern homes that are fit for the future, there are some valves which shouldn't be overlooked.

Valves manage the flow of water throughout a system, which can directly support levels of efficiency and consumption. In order to create homes that are fit for the future, there are some valves which shouldn't be overlooked, including:

1. Pressure Reducing Valves (PRVs) are essential for regulating water pressure entering a property, ensuring it is adequate to deliver on occupant needs, while supporting safe system operation by avoiding excessive levels of pressure. By effectively reducing water pressure, flow rate is also impacted, lowering the risk of high water consumption which in turn contributes to the efficiency goal set out by the FHS. Compact models like the Reliance Valves 312 Compact PRV are well-suited for domestic systems, offering reliable performance alongside easy maintenance.

2. Double Check Valves are designed to prevent backflow, which can contaminate the water supply and pose health risks. Although domestic properties are typically low risk, incorporating double-check valves provides an additional layer of protection and are essential in order to comply with the water regulations. This aligns with the emphasis within the FHS on ensuring safety and compliance in all aspects of home construction.

3. Thermostatic Mixing Valves (TMVs) are required in new builds to prevent scalding and ensure safe water temperatures. By regulating the temperature of water, this valve can protect occupants from burns at the point of use, while also working in the background to help prevent the growth of bacteria.

Incorporating these valves early in the build process ensures that systems meet the FHS's rigorous standards, enhance energy efficiency, and provide long-term reliability and safety. By choosing the right valves, specifiers can ensure new build homes are high-performing and fully compliant with the latest regulations.

As the construction industry prepares for updated home efficiency standards to be introduced by the new Government, specifiers must stay well-informed about the latest regulations to effectively shape the homes of tomorrow. The UK's commitment to achieving net zero emissions by 2050 requires significant changes in how new homes are built, particularly in enhancing energy efficiency and sustainability. The introduction of the FHS builds on this by setting new standards for reducing energy consumption and promoting the use of renewable heat sources.

For specifiers, understanding and implementing these regulations is crucial. The FHS emphasises decarbonising heating and hot water systems and reducing heat waste, making the selection of appropriate plumbing and heating materials more important than ever. Key considerations include adhering to the new temperature limits for heating systems, ensuring proper insulation of pipework, and transitioning to renewable heat sources.

Specifiers play a vital role in ensuring that systems not only comply with these regulations but also deliver reliable, efficient, and long-lasting performance. By planning and selecting the right materials and technologies, specifiers can help create homes that meet modern standards while contributing to overall sustainability goals. ■

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

Words by Emma Walshaw, Founder, Detail Library

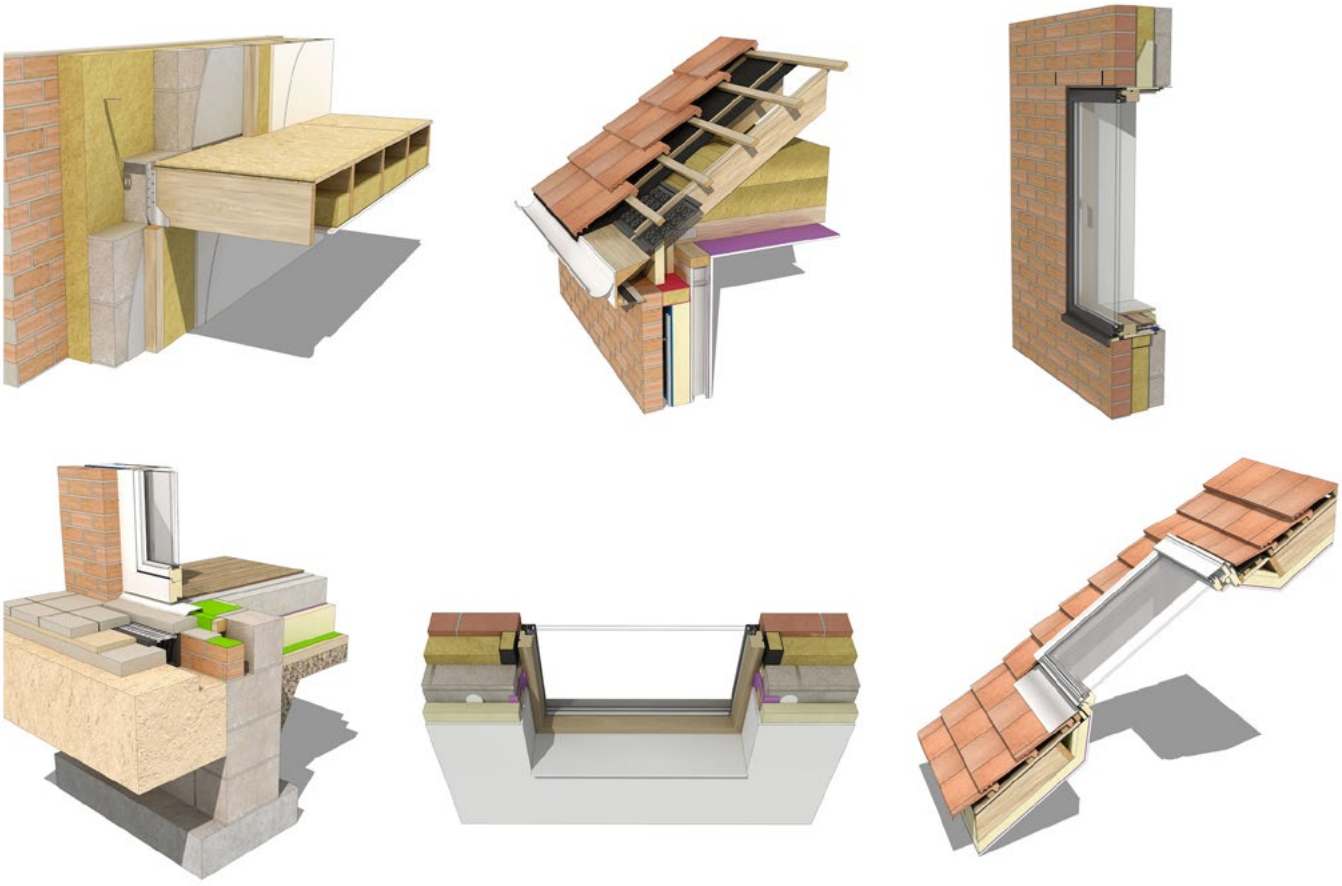
Studying architectural disciplines can be hard. There are so many skills to pick up and so many different topics to learn... it's just a mass of information to soak up. As an Architectural Technology student at Sheffield Hallam, Emma Walshaw was keen to really get to grips with the technical aspects 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.

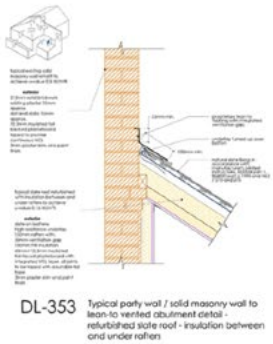
How it all started – First In Architecture and the Books

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 six books and is currently working on her seventh, on House Extensions, which she is co-authoring with Aida Rodriguez-Vega (who produces much of the detailing work for Detail Library).

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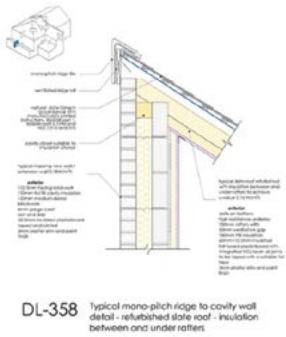
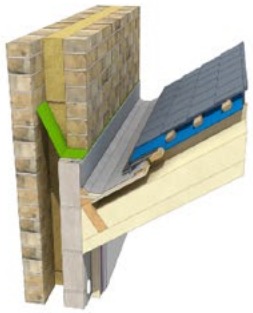
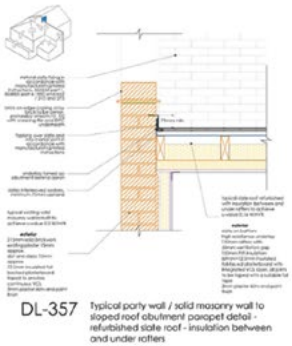
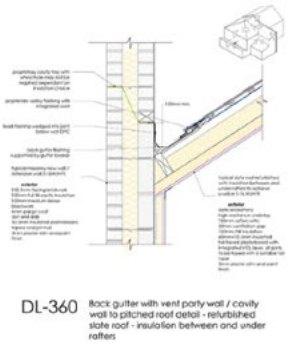

DL-358 Typical mono-pitch ridge to cavity wall detail - refurbished slate roof - insulation between and under rafters




DL-357 Typical party wall / solid masonry wall to sloped roof abutment parapet detail - refurbished slate roof - insulation between and under rafters


DL-360 Back gutter with vent party wall / cavity wall to pitched roof detail - refurbished slate roof - insulation between and under rafters

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 architects and designers.

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.

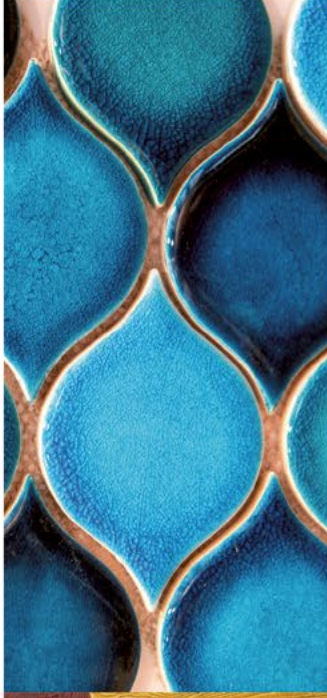
The drawings are produced in line with the Building Regulations and British Standards, as well as using additional guidance from LABC best practice and NHBC best practice. Anyone using the details is encouraged to ensure they carry out their own research and due diligence, adjusting the drawings as required. 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 architects and designers with their workflow.

Special discount for CIAT membership

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



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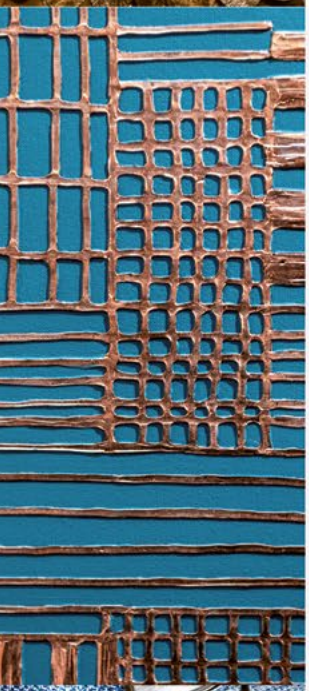

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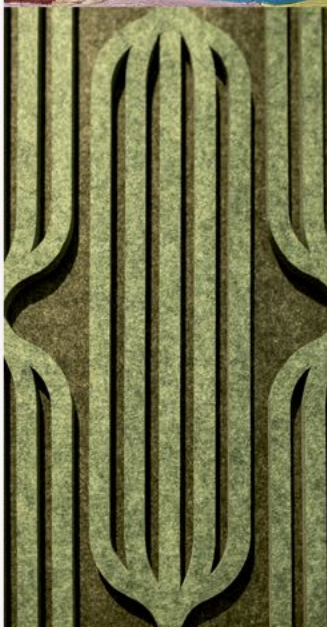

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Exploring Lesser-Known Permitted Development Rights for Change of Use

Words by John Mason, Associate, Carter Jonas

For over a decade, permitted development rights (PDRs) have been a crucial aspect of the planning system. PDRs have shown to be beneficial in responding to need; for example, regenerating high streets post-Covid and providing a tool for addressing the housing crisis. PDRs allow certain types of building work and changes of use to be carried out without the need for a full planning application. But while many in the development sector are familiar with PDRs for residential extensions or office-to-residential conversions, there are many lesser-known rights that allow change of use – rights which potentially pose significant opportunities to ATs, architects, developers, and investors.

Permitted development rights are granted by a Statutory Instrument attached to Town and Country Planning legislation. The PDRs enable specific changes to be made without the need for planning permission. Part 3 of the General Permitted Development Order (England) (2015) sets out the changes of use that can be permitted. These rights are subject to conditions and limitations (as described below) to mitigate the impact on the surrounding area.

Successive Governments have relaxed rules to allow for a variety of buildings to be converted into homes without requiring planning permission, aiming to boost the supply of homes (particularly in urban areas) and revitalise high streets. The rights most commonly used include the conversion of shops and offices into homes (Class MA) and agricultural barns into homes (Class Q). But a variety of other rights exist:

- Class M allows the conversion of up to 150sq.m of laundrettes, betting offices, payday loan shops and takeaways to homes.
- Class N allows the conversion of up to 150sq.m of an amusement arcade or casino to homes.
- Classes P and PA allow the conversion of up to 500sq.m of storage or distribution centres and light industrial uses to homes.
- Class L allows the conversion of small houses in multiple occupation (HMOs) to be converted into single homes, and vice versa.

From 2020, partly in response to the Covid crisis and its impact on the high street, the MHCLG created the new Class E category of uses. This combines a wide range of "commercial, business and services" including shops, cafés, restaurants, offices, clinics, health centres, creches, day nurseries, day centres, gyms and most indoor recreations, research and development or light industrial town centre uses.

It has wide ranging potential application, allowing for conversion of an office into a creche, a restaurant into a gym, or a day nursery into a health centre, without the need for planning permission.

One of the more recent PDRs, Class MA, allows buildings that qualify as Class E to be converted into residential use, opening up considerable opportunities for a small industrial unit, health club, or café to become a home. The media's interest in some of the less successful office-to-residential conversions may have taken attention away from some of

these other opportunities. Class M and Class N also allow the conversion of buildings for other uses to homes, such as amusement arcades, casinos, laundrettes, betting offices, and takeaways.

Class R allows agricultural buildings to be converted to flexible commercial use and Class S allows for agricultural buildings to be state-funded schools, while Class T allows commercial uses (like hotels) to become state-funded schools and Class U allows converted state-funded schools to be returned to their previous use.

Inevitably there are caveats. Conversions into homes must adhere to national space standards, and the rights do not apply to buildings in use as pubs, theatres and live music venues due to their local community role and cultural significance.

In all cases, legislation states that buildings that lie within an area of ecological/landscape interest or involve a listed building cannot be converted. In most cases, prior approval must be sought from the local authority, which can assess the application in terms of highway impact, contamination, flood risk, design, and provision of adequate natural light in all habitable rooms. For Class M, a council can also assess the "desirability" of conversion (however that may be interpreted).

Limited building works are permitted for Class N (amusement arcades or casinos to residential), but it should be noted that other Classes permit a change of use only – planning permission would have to be sought for any external changes. It's important that advice is sought, as each PDR comes with different restrictions.

Permitted development rights for the conversion of buildings can allow landowners and councils to respond nimbly to changing housing needs in their areas. Repurposing existing buildings is quicker and more sustainable than building new ones and could be a particularly useful tool in bringing life back to high streets and particularly lucrative for ATs. At the same time, careful consideration is necessary to ensure that these conversions provide high-quality housing and maintain the balance of local services. And whilst designed to streamline the process, the legislation remains something of a minefield. ■

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Shelter from the storm: Ukraine's architects paving the path to recovery

Words by Liam Briggs MCIAT, Senior Architectural Technologist

I'd arranged to meet Oleg Drozdov on an arbitrary Tuesday in September. In the early hours of that morning, a Russian missile attack struck a residential area of Lviv, the western city where Oleg is residing.

The shelling killed multiple people, including children, and damaged many historic buildings, schools, and homes. An attack followed a day later in the city of Poltava, killing fifty people, in what has been one of the deadliest weeks of the invasion.

When we finally connected, Oleg apologetically explained the electricity shortage, warning that he might cut out at any point. Moments later, the call went dark. After a brief scramble and a look of awkward apprehension on my face, we reconnected. "So, is this a common occurrence with the electricity grid?" I asked.

"Yes," he replied. "For the first few weeks after shelling, there was a huge attack on Ukraine with around 200 missiles. After that, we managed to repair things a bit, but if it's a hot day and everyone's using electricity, the system struggles. That's why we experience blackouts during the day. But we're actually happy because we have around twelve hours of electricity per day, which is okay. In some cities, it's much worse."

This is a common theme across Ukraine. Russia targeted critical infrastructure across the country soon after the invasion started, leaving many people struggling to maintain the basic provisions needed to carry out a normal day of work.

Oleg moved with his family at the start of the invasion from Kharkiv, the border city where he had built Drozdov & Partners into an architectural stalwart. Before the war, the firm employed around 180 people. Like many others, they have been impacted by the mass exodus of Ukrainians. As I write, there are nearly 3.7 million internally displaced

people in Ukraine and almost 6.5 million refugees globally (according to UNHCR). "Out of the 180 people employed by our office over nearly 30 years, a little more than half have left the country," he explains. When asked about the challenges facing the practice, he reiterates the point: "It's a huge strain in terms of human resources or human capital. Many people are involved, and we still have a lot of work. However, the conditions are difficult, and it affects the quality of our portfolios."

The firm, known for its contributions across various sectors, has created culturally significant buildings. Among them is the bold transformation of the Teatr na Podoli in Kyiv, a once-disused theatre brought back to life in contemporary architectural fashion, with a standing seam facade reflecting its historical mansard roof. Another notable project is the VG Horse Club in Kharkiv, which features a beautifully unique timber façade and a design that focuses on the horses rather than humans. "For us, it was a new, unusual experience of thinking within the framework of a different ergonomic system," explains Drozdov & Partners.

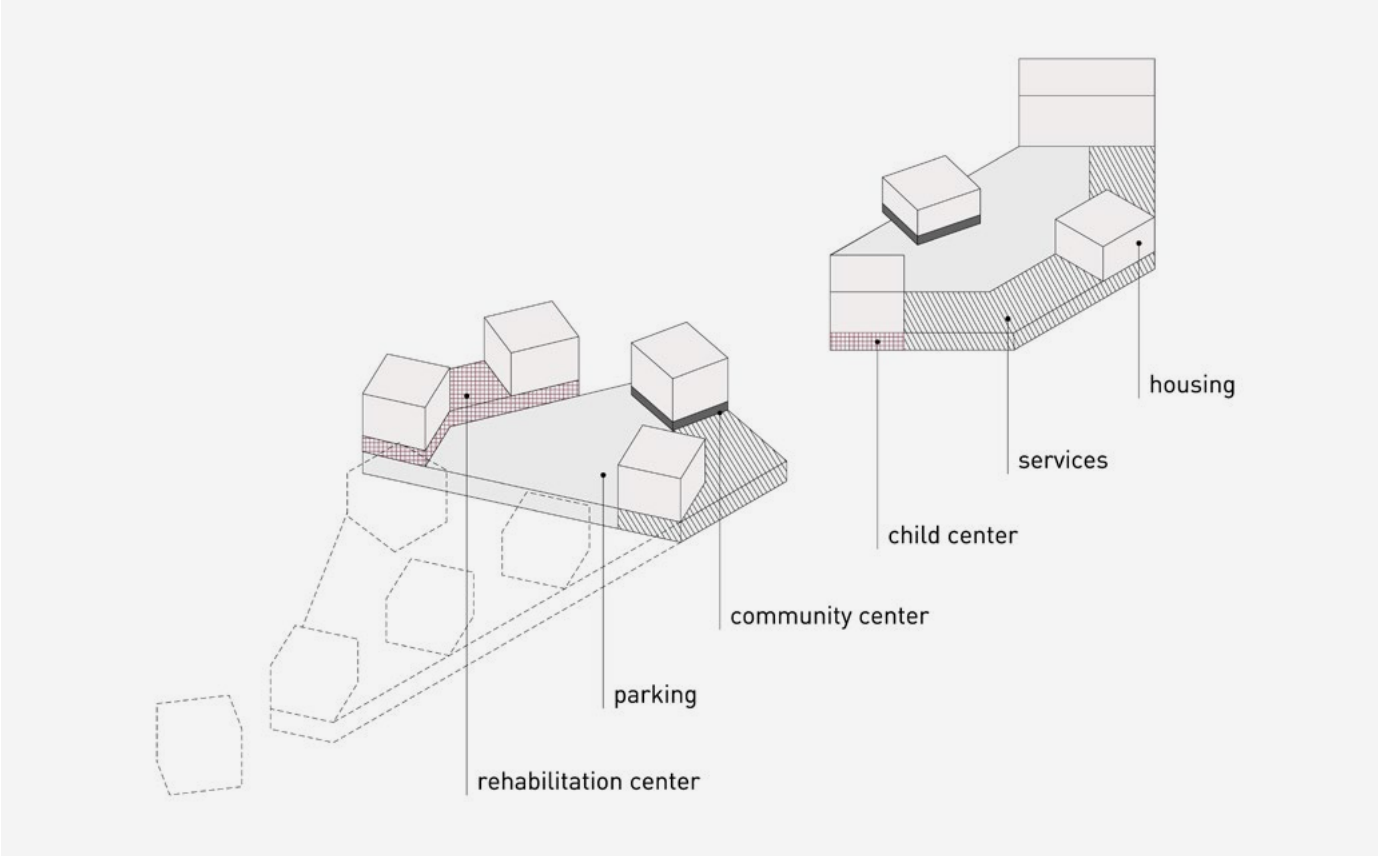
Despite these challenges, Drozdov & Partners have continued to produce remarkable work since the invasion began. I was particularly keen to discuss how their pre-war practice transitioned to meet the current realities. Oleg explained: "Before the war, our focus was on public buildings, education, new industries, and cultural institutions, with significant projects like the Literature Museum in Kharkiv and the State Fine Art Museum in Dnipro. During the war, we've shifted mainly to housing – particularly social housing and some commercial housing for people displaced to the western regions of Ukraine."

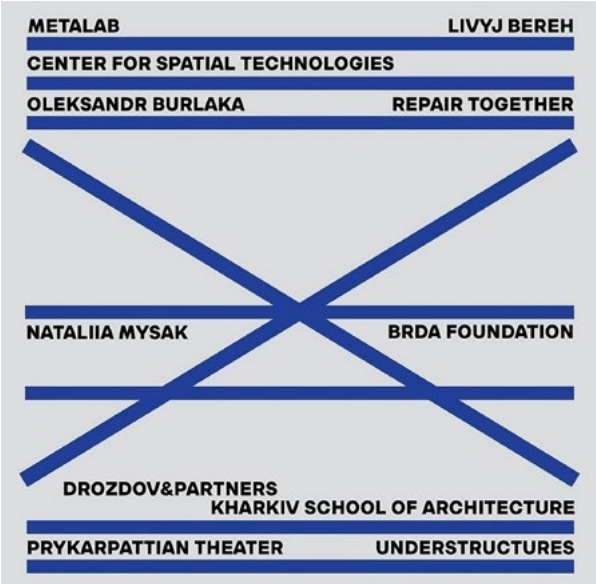
The sheer scale of destruction and displacement caused by two years of war in Ukraine is staggering. The true implications of this conflict will only be fully understood once the tides of oppression have receded from European soil. When asked if he is confident about the emergence of a post-war era, Oleg responded solemnly, "The destruction caused by the war is significant, but the 80 years of Soviet legacy also pose a huge challenge. If we add the destruction and psychological damage from the war on top of that, it becomes an enormous task."

A central role of the architect during a crisis, Oleg states poignantly, is that of an "agent of change." One such example is the social housing project, Mykolaychuka, in Lviv, which will provide housing for internally displaced people. The project is designed as a system of dwellings, public spaces, boulevards, and parks. By combining modular technologies with in-situ construction, the project's scale and ambition, especially in wartime, is admirable. Closer to home, we are facing a self-perpetuating housing crisis of our own. There are undoubtedly lessons to be learned.

Currently showing at the AIA New York Center for Architecture, the exhibition "Constructing Hope: Ukraine" presents the work of over a dozen participants applying architectural thinking to support Ukraine. It stands as a fascinating beacon of architectural ingenuity, with human values at its core. Today, Ukraine has become a temporary home for millions. As with any conflict, the stream of internally displaced people flows away from danger like a great river. The need for temporary accommodation, often within very short timeframes, is vital. The exhibition includes the Paper Partition System, a non-permanent shelter system, designed primarily by Japanese architect Shigeru Ban and adapted by Drozdov & Partners for deployment across multiple centres in Ukraine.

The system uses paper tubes to assemble modular frames that are both reusable and recyclable, providing "a space where people may feel safe and calm. It is about humane privacy, respect, and sensitivity to each other – things most of us need today."





The system's principles even extend to furniture, such as chipboard beds and kitchen units. Oleg's studio, along with its project partners, created a solution of simplicity that offers humanity in moments of desperation.

"When we founded the school in 2017," Oleg shared, quickly shifting the conversation to his academic work with the Kharkiv School of Architecture, "we were inspired by the Revolution of Dignity in 2014. We understood that the growing capacity of civic society needed a partner responsible for a new understanding of the built environment."

As co-founder, president, and lecturer at the school, he was eager to discuss its impact. "That's why we designed a program that shifts the role of the architect to one of social moderation and integration of different knowledge and aspirations. The role of architecture in recovery is crucial – not just symbolically, but for the mental rehabilitation of communities."

Oleg spoke passionately about the school's recently launched Master's programme, which "aims to shift the professional paradigms of architects and professionals from interdisciplinary, design-related fields toward urban thinking, with a focus on Ukraine's post-war recovery." The programme aligns with Oleg's vision of how architecture can contribute to rebuilding both physically and socially.

He then described a concept called Digital Tectonics, "which focuses on advanced technologies most relevant for reconstruction and adaptive reuse – perhaps even for the reconstruction of Soviet mass panel housing." Oleg didn't hesitate to expand on the philosophical ambitions of the program, emphasising its broader vision: "It's a base for building common ground, common dreams, and shared interests – like building a future together, in architecture or urbanism."

It is inspirational, the commitment to continuously developing the profession, to the community and the future of a post-war Ukraine. Oleg reflects, "Our students are enormously motivated, the productivity and the level of their projects, it's incredible. They are very talented, projects on housing displaced people, rehabilitation centres. It's like a civic service. They see the roll and they're already trained to keep this deep and serious conversation with society. Before war and after, it's some kind of rubicon."

By the end of our conversation, I was deeply moved by the work Oleg and his colleagues. We discussed Ro3kvit, a coalition of over 100 professionals united in the mission to rebuild Ukraine's urban and rural landscape. One hour felt woefully insufficient to capture the full scope of what Oleg, his practice, his students, and his many peers across Ukraine are doing to uphold their sovereignty in the face of terror.

Our discussion broadened to the current situation, Oleg shared the cold, brutal reality unfolding across the eastern border with Russia. "We made a choice, a civilisational choice, and this war is existential," he said. "Bakhmut, a beautiful historical town 200 years old – there's not a single building left. It's a disaster." As we neared the end of our conversation, I found myself grappling to comprehend the scale of devastation and the emotional burden carried by every Ukrainian citizen. Writing this from the comfort of my home, it is impossible to imagine the chaos and catastrophic upheaval of an entire nation. We experienced a pandemic, emerging with a 'new normal' that closely resembled what came before. But Ukraine remains on a perilous edge.

The role of architecture in recovery is crucial – not just symbolically, but for the mental rehabilitation of communities.

"Deaths are becoming routine – so many beautiful young children, every day," Oleg reflected, his voice heavy. "And you stop reacting. It's as though it's becoming chronic." He apologised, needing to join another call. I thanked him deeply for his time and promised to be in touch.

As we finished, I felt an overwhelming sense of privilege and gratitude for the opportunity to have heard about a daily reality so far removed from my own. The power outages, the struggle to maintain normal civic life under constant threat of shelling, and the unwavering, uncompromising drive to ensure Ukraine emerges from this dark chapter with strength, resilience, and hope – all of it left a profound impression.

Ukraine is poised to rise, with its feet firmly on the ground and a clenched fist raised, liberated beneath its blue and yellow skies. ■

AT Awards 2025

The Architectural Technology Awards (AT Awards) 2025 recognise the people and projects that demonstrate excellence in Architectural Technology.

Entries are open to any organisation or individual, both within the UK and internationally, that practise Architectural Technology.

Entries for the AT Awards 2025 open on 4 February 2025.

About the Awards

The AT Awards are the premier accolades that celebrate outstanding achievement in the discipline of Architectural Technology.

The AT Awards ceremony is an afternoon to remember, culminating in the prestigious Chartered Architectural Technologist of the Year Award (CATY) category. For more than 40 years, the Institute has recognised the most talented Chartered Architectural Technologists and innovative projects across the globe.

Why enter the AT Awards?

- To gain industry-wide recognition and reward for you or your practice.
- Your entry will be rigorously judged and peer assessed by a panel of experienced Chartered Architectural Technologists.
- To increase brand awareness and marketing potential with your networks and colleagues.
- To receive unprecedented exposure from CIAT online and in print.

Judging

Each category has its own independent Panel of Judges, made up of Chartered Architectural Technologists, who review entries to determine the Finalists and select the winners for their category. The judging process is designed to provide a fair and transparent process that is overseen by the Verification Panel.

Categories

Small Project of the Year
This Award recognises and celebrates schemes that most effectively demonstrate technical excellence realised at a more modest cost. This category may cover anything from small houses and extensions through to retail and unique projects.

New Build of the Year
This Award recognises and celebrates new build projects or schemes that most effectively demonstrate technical excellence.

Retrofit of the Year
This Award recognises and celebrates the value of exceptional retrofitting across all sectors and where those involved have given new or improved life to a building or infrastructure, demonstrating technical excellence.

Conversion of the Year
This Award recognises and celebrates a conversion project whether to a building or structure and has demonstrated technical excellence.

Project of the Year
This Award is given to any winner across the four categories that is an outstanding example of Architectural Technology, at the discretion of the Judging Panel.

The AT Innovation Award
This Award recognises and celebrates vocational research, innovation and delivery in the context of Architectural Technology.

Student Project of the Year
This Award recognises and celebrates a project completed by a student who has demonstrated technical excellence.

Student Report of the Year
This Award recognises and celebrates a report completed by a student in the context of Architectural Technology.

Gold Award
This Award recognises and celebrates an individual who has gone above and beyond with their contribution and commitment to the Institute.

The aspiration Award for Emerging Talent in AT
This Award recognises and celebrates an individual who is a new and exceptional talent in Architectural Technology. It awards individuals who have demonstrated the highest level of excellence at the very start of their career in AT.

Chartered Architectural Technologist of the Year
This Award recognises and celebrates an individual who has demonstrated outstanding success and is the very best example of excellence and professionalism in Architectural Technology.

President's Medal
This Award recognises and celebrates an extraordinary distinction or exceptional contribution to Architectural Technology and the profession. It is awarded once in any one Presidential term.

New categories for 2025

Small Project of the Year
New Build of the Year
Retrofit of the Year
Conversion of the Year

These Awards are open to all, individuals and/or any practices, but must have a CIAT member or an affiliate as part of your team. The same project can be entered into more than one category, though must be as separate submissions.

Projects must have completed during the period **1 January 2020 to 1 January 2025** and operational within twelve months of its completion.

Criteria for submission
Submissions will be assessed in terms of their design context, concept and creativity against their response to Architectural Technology, relating to function, fabric performance and delivery.

Each entry will be assessed against the following criteria:
- Collaboration (including assembly and buildability)
- Digital (including functionality and technology)
- Safety (including inclusivity, performance and robustness)
- Sustainability (including innovation, materials, climate resilience and carbon reduction)

Submission
A completed application form along with a project summary (500 words), summaries of each criterion (up to 500 words each), and why you think you should win (up to 150 words). The application must be submitted with supplementary images. Additional specialist displays or video are welcomed. All supporting information should be collated into one PDF document for upload.

Entry fee
There is a £120 (plus VAT) application fee.

Award
The Winner receives a plaque for permanent attachment to the project and for the individual and/or practice, a trophy, a certificate, and an AT Awards logo.

Project of the Year
This Award will be selected at the discretion of the Judging Panel from across the four categories.

Award
The Winner receives a trophy, a certificate, and an AT Awards logo.

The AT Awards are the premier accolades that celebrate outstanding achievement in the discipline of Architectural Technology.

The AT Innovation Award

This Award is open to all – individuals and/or any practices – but you must have a CIAT member or an affiliate as part of your team.

Each entry will be assessed against the following criteria:
- Innovation in practice
- Innovation in research

Criteria for submission
Submissions will be assessed in terms of their outputs and impact in demonstrating one or more of the following: producing and interpreting new design practices, procedures, products, findings or new material; engaging with new and/or complex problems; developing innovative methods, methodologies and analytical techniques; showing imaginative and creative scope; providing new practices or processes or new methods, interpretations and/or insights; collecting and engaging with novel types of data; and/or advancing theory or the analysis of practice or research.

Each entry will be assessed against the following criteria:
Originality: the extent to which the submission makes an important and innovative contribution in the field of professional practice or research.
Significance: the extent to which the work has influenced, or has the capacity to influence, knowledge or the development and understanding of practice and/or policy.
Rigour: the extent to which the work demonstrates coherence and integrity, and adopts robust and appropriate concepts, analyses, sources, theories and/or methodologies.

In assessing submissions, Judges will be looking for sufficient evidence of at least one or more of the following:
- rigour regarding design, method, execution and analysis
- a significant addition to knowledge in the field of practice/research
- the significance and impact of the submission
- the scale, challenge and difficulty posed by the research
- logical coherence of argument and presentation
- original contribution to practice/research
- the significance of the work in advancing knowledge, skills, understanding and – in theory – advancing practice, education, management and/or policy
- the applicability and significance to the relevant practice users and/or research users
- the potential applicability to changes to practice and/or research.

Submission
A completed application form and a written report of 2,000 words, with annexes and appendices as supporting evidence, in written or graphical formats.

Entry fee
There is a £120 (plus VAT) application fee.

Award
The Winner receives a trophy, a certificate, and an AT Awards logo.

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How can digital twins boost profitability within construction?

Words by Komatsu Smart Construction

Profit margins are at an all-time low across the construction industry, with the average profit margin at just six percent. A recent study in the Journal of Building Engineering found that almost half of all construction projects result in a loss, creating an enormous strain on businesses and making them vulnerable to unforeseen project issues.

For a construction project to be profitable, site managers must consider delivery time, changing costs throughout the project lifetime, and any unexpected on site issues that might cause delays.

After years of following traditional practices, the construction industry is now adopting digital solutions to transform its operations and increase profitability. Digital twins can be hugely beneficial to project leaders, reducing the amount of time staff are required on site, whilst enhancing safety and allowing decisions to be made virtually.

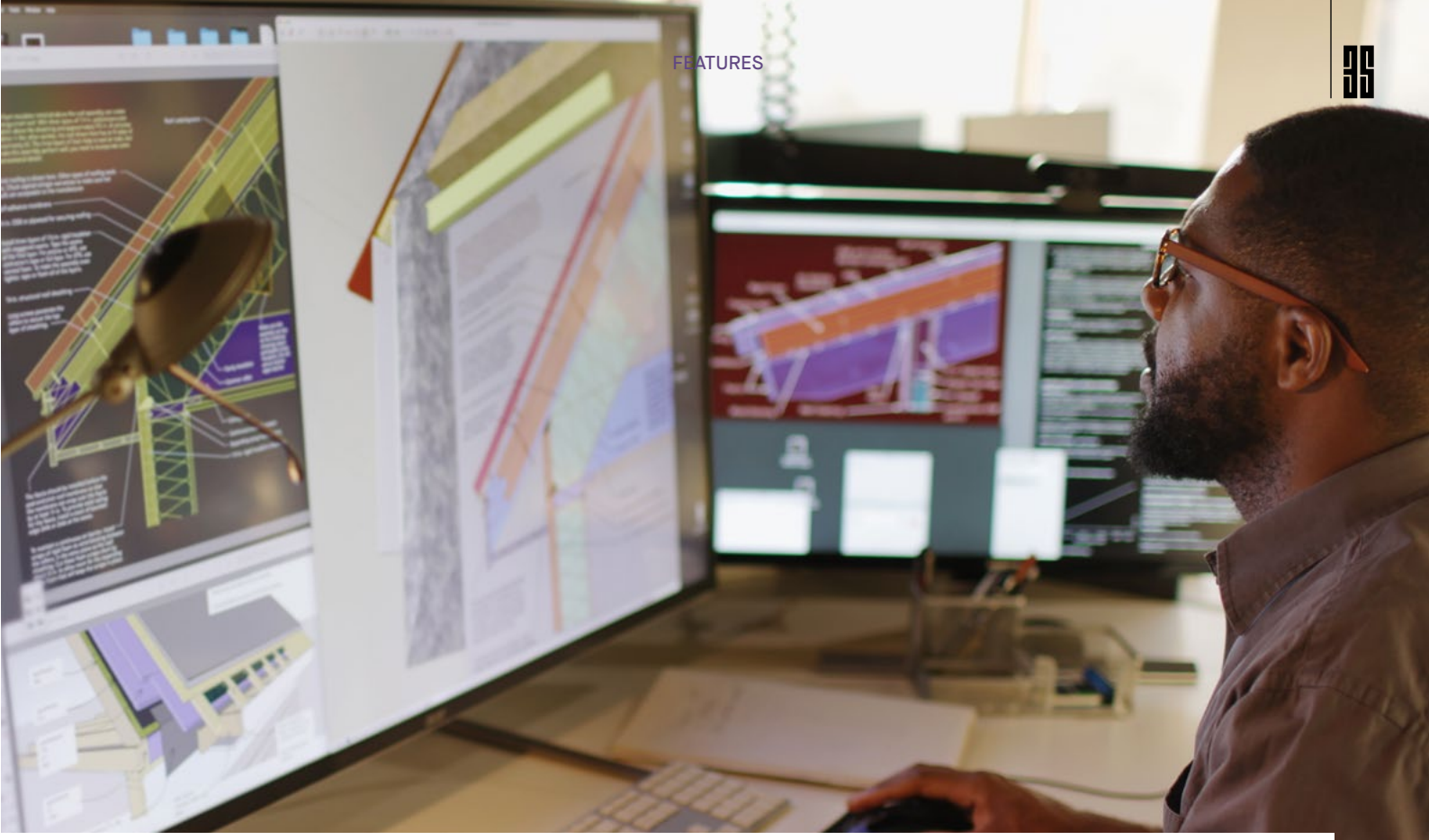
As we all know, time is money. Digital construction improves profitability in a myriad of ways, including by freeing up time for the site manager. By reducing commuting time and speeding up the efficiency of all-important data and file transfers that are essential for doing the work, site managers can spend less time on administration tasks.

This increases capacity to work across more sites and oversee a larger portfolio of construction or earthmoving projects, as well as spending more time liaising with suppliers and clients to ensure accuracy and prevent potential errors.

Digital construction tools also grant stakeholders access to view a job site virtually, alleviating the need to travel multiple times a day, saving on petrol and commuting costs across all outputs.

For Sina Motsch, site manager for HEITKAMP Corporate Group, it is crucial that she finds an easy way to make sense of the job site and make use of the information effectively. By utilising Komatsu's Smart Construction Dashboard, Sina was able to collect as-built data and generate an accurate digital twin that was automatically updated as the site changed almost daily. Using a digital twin of her project site enabled Sina to immediately discover any delays, developments or potential issues across the jobsite without having to visit in person.

Digital twins are here to stay and, when utilised well, project managers can gain a wider status understanding, resulting in quicker decision making and boosted profitability. ■



OpenUSD possibilities: look before you leap

Words by Rob Smith, CTO, Creative ITC

OpenUSD solutions are set to transform architecture and design. But is your firm ready to take the technological leap? We outline the key considerations for design practices looking to harness the power of OpenUSD.

Abolishing data silos and IT system incompatibilities are long-standing challenges in the architecture, engineering and construction (AEC) sector. Recent years have seen USD (Universal Scene Description) make significant inroads on overcoming these issues. Several industries have started to deploy USD to unlock collaboration and innovation, extending well beyond its origins in the film industry.

While OpenUSD has been around for a while, more recently, the Alliance for OpenUSD (AOUSD) has brought together some of the leaders in 3D visualisation – Pixar, Nvidia, Adobe, Autodesk and Apple – to advance the standardisation and interoperability of the entire 3D landscape. New solutions, such as NVIDIA Omniverse, designed to enable firms to harness the power of OpenUSD, have begun to emerge, unlocking new opportunities for the architecture sector and many others.

This new generation of OpenUSD solutions provide a common, scalable, and collaborative platform for digital project management to enhance the creation and streamline sharing of 3D assets. They remove compatibility issues that have hampered 3D collaboration, seamlessly integrating design tools into a single, fluid workflow. In architecture and design, this will help standardise 3D modelling and data exchange practices and accelerate use of OpenUSD's powerful features.

These new platforms for developing OpenUSD applications also allow developers to propel innovation by integrating powerful AI functionalities to enhance design and engineering processes. Tailored construction industry-specific features will also accelerate uptake through open community forums focused on simulation capabilities, BIM integration, and project data handling. Such developments will support sustainable building design by enabling complex, real-world simulations.

Furthermore, March 2024 saw AOUSD announce the launch of new working groups for Materials and Geometry, which will be particularly welcome for the construction industry. These groups will focus on standardisation of material definitions and specifications for describing surfaces, shapes and volumes in both physical and virtual worlds.

Recognising the potential to boost operational efficiency and enhance collaboration, some architectural firms have already started to deploy OpenUSD solutions in various scenarios.

They are being used to aid architectural visualisation through the creation of highly detailed and interactive 3D models for client presentations and design reviews. Real-time simulations are being conducted by engineering firms to test structural integrity and performance under various conditions. Digital twinning is a standout feature, offering architects and designers the ability to simulate and interact with their creations throughout the entire lifecycle of a building. Combined with AI functionalities which automate routine tasks and refine design processes, this use of OpenUSD is already helping firms boost sustainability and operational efficiency in projects.

The potential advantages of OpenUSD solutions are significant. Promised benefits include greater operational efficiency, improved collaboration, better resource management and enhanced sustainability. The ability to conduct real-time simulations and predictive analyses will enable smarter, faster decision-making, reducing risk and costs.

Industry adoption of OpenUSD is still in its very early stages, with many firms hesitant to invest. Concerns about the costs and complexities involved with integrating these new technologies effectively into legacy systems are well-founded; not every firm is in a position to take full advantage of OpenUSD. For architecture and design practices investigating OpenUSD solutions, there are some important considerations to determine if your organisation is genuinely ready:

- **Establishing business value.** The decision to invest in any new technology must be founded on how it will enable the firm to deliver value to its clients and stakeholders. Assessment of OpenUSD should start with understanding business priorities, legacy IT systems and how it can leverage the right tools for competitive advantage. Scalable solutions combining global access to advanced toolsets are a complex mix that must be considered in alignment with business strategy.

- **Solid IT foundations.** Before adopting OpenUSD, it is crucial to determine whether your IT infrastructure is up to the job. Underestimating hardware requirements is a common error, particularly GPUs on which these platforms heavily rely – an oversight that can lead to unplanned costs and delays. Another frequently overlooked but essential aspect is establishing the capability of your network to manage the immense data requirements of real-time, global collaboration.

- **Assessing skills.** As with any ground-breaking new technology, OpenUSD solutions will require your firm to invest in skill development. Be objective about your resources – is your in-house team capable of designing and deploying an OpenUSD platform enterprise-wide? Will they be able to manage it effectively long-term, keeping on top of infrastructure, network, upgrades, licensing, application optimisation, training, and support? If you draft in external support, a provider with a proven track record in your business sector will be best placed to guide you through the process and provide a managed solution to help your practice reap full ROI.

- **Driving innovation.** Adopting a new technology is a long-haul journey requiring commitment to overcome inevitable bumps in the road. Deployment will be greatly helped by appointing a champion within the firm dedicated to the adoption process, someone combining expertise in both the technical intricacies of the platform and its practical applications. This person will smooth the initial learning phase and rollout, cultivate a culture of innovation, and convey project benefits to maintain impetus.

In pursuit of competitive advantage, architectural firms frequently assess the capabilities of new technologies to deliver value. The potential of OpenUSD solutions to transform the architecture, engineering and construction fields is huge. Some of the biggest names in their respective fields – BMW, Siemens, WPP and Mercedes-Benz – are spearheading the OpenUSD revolution and already trialling solutions to explore the art of the possible.

The ability to conduct real-time simulations and predictive analyses will enable smarter, faster decision-making, reducing risk and costs.

However, it is not just the global giants and those with the largest R&D budgets than can take advantage. The open framework model is set to level the playing field. New platforms standardise 3D workflows and integrate advanced AI and simulation capabilities. This reduces reliance on proprietary software and lowers entry barriers for smaller firms, enabling them to access powerful tools to compete for projects.

Promises of OpenUSD bringing technological advancements to empower the industry to tackle challenges with unprecedented agility, collaboration and efficiency are intoxicating. But it pays to keep a pragmatic head on your shoulders. It is essential to maintain close collaboration between IT and business leaders to ensure your firm puts the right technology solutions in place at the right time to scale and innovate in tandem with your business needs. ■

AI in architecture: elevating 3D modelling and spatial design with automation and innovation

Words by Aris Komninos, AI & XR Product Manager, SketchUp

Due to rapid developments in recent years, AI-powered technologies will soon be at the fingertips of designers everywhere. Research from Gitnux suggests that 40% of tasks in design development can be automated using AI.

This marks a new era in architectural practice, offering the potential to revolutionise spatial design by helping address some of the industry's most complex challenges.

As the industry moves to adopt AI technology, it is essential to consider its full benefits – from the planning stage right through to project implementation. Looking at AI through the whole project life cycle ensures that it is implemented effectively and serves as a robust problem-solving tool that enhances the efficiency and creativity of spatial design projects.

One major shift driven by AI will be enhanced project planning and execution through improved modelling and rendering capabilities. Artificial intelligence can help designers tackle complex spatial challenges quicker and more accurately by providing them with design alternatives that fulfil the project's criteria, such as program, budget, energy performance, and any restrictions imposed by planning regulations or the project's real-world context.

AI has the power to not only generate text-based responses but also create precise visual representations of suggested designs. A major part of this is AI-driven visualisation, which allows for the instant creation of realistic visuals and concepts within real-world contexts.

Using AI, designers can generate multiple design iterations in a fraction of the time, accelerating the creation of compelling visuals by allowing users to combine a 3D model with a text prompt to create a new, AI-generated image.

Not only will this free up time in already stretched teams, but rapid prototyping can enable increased exploration of spatial possibilities, resulting in more innovative design solutions and helping unblock the creative process. In the same way that real-time rendering forever changed the dynamics in architectural visualisation, design process enhanced by AI can unlock similar if not far greater potential.

The potential for AI to transform the architecture and design industries extends beyond the drafting table. AI, coupled with 3D modelling and data analysis, can be instrumental in breaking down the existing silos, which prevent collaboration between designers, contractors, engineers and clients.

3D can provide a common visual language that facilitates better communication and understanding and helps foster a more integrated approach to design and construction. AI can help enhance this creation, making more realistic, data-rich, and effective 3D models. As building requirements, sustainability targets, and external pressures increase, this improved communication can be instrumental in streamlining project lifecycles and easing the pressure on teams.

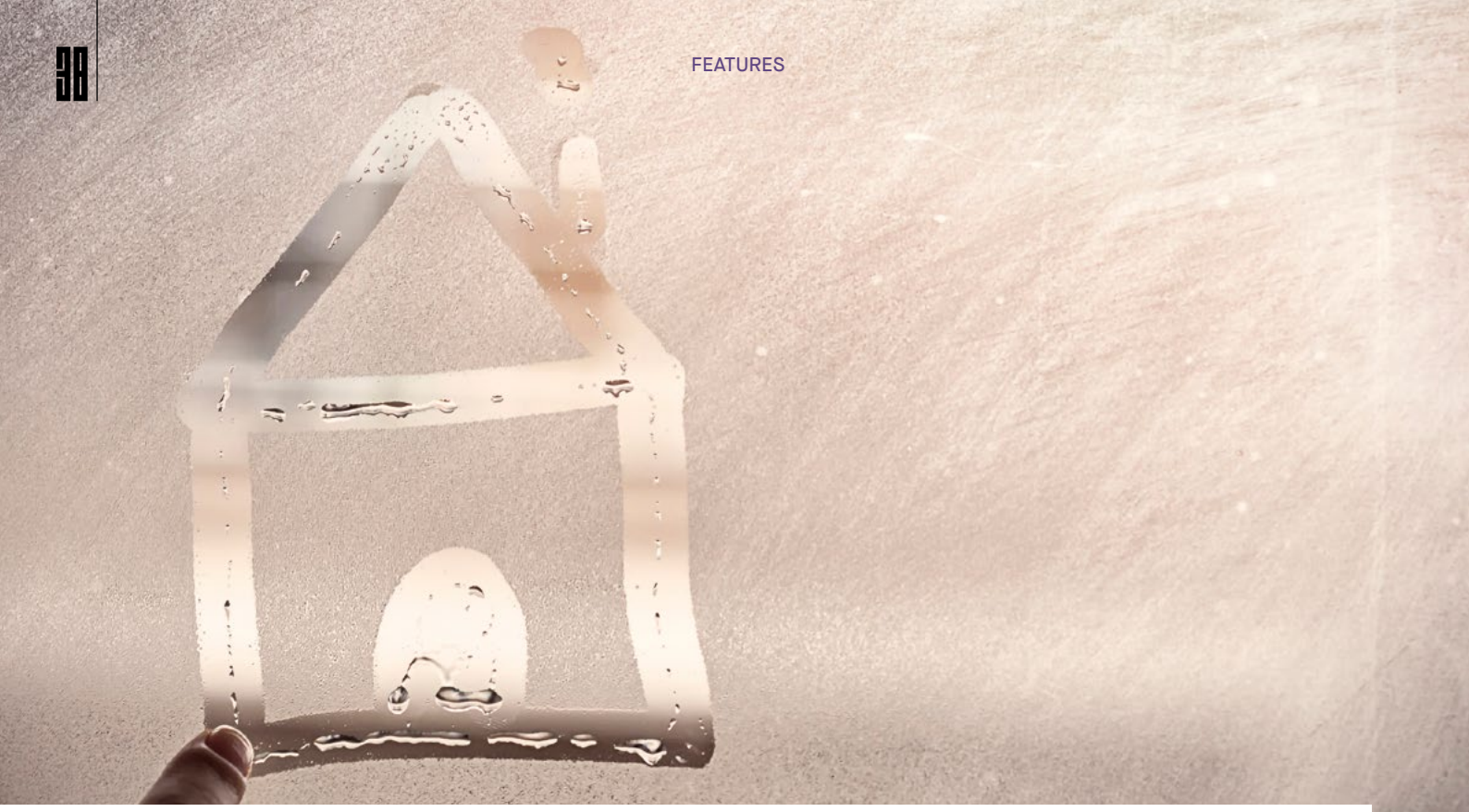
And while AI's ability to improve collaboration by providing a visual language is hugely beneficial, it can also facilitate communication beyond visualisation. AI can be used to analyse project information and data such as climate and location data, regulations and contextual limitations, to identify issues and complications that could otherwise be overlooked. Meanwhile, it's also able to automate tasks such as classification and estimation.

This can be instrumental in reducing project delivery delays and lowering costs, ensuring improved client satisfaction, and offering a safety net for designers to reduce stress during hectic project cycles.

One of the most immediate benefits of AI in architecture is its ability to free up time spent on otherwise repetitive and onerous tasks. This allows designers to focus on the elements of design that require a human creative touch. This could include automating tasks such as analysing lengthy documents like planning regulations, competition and design briefs, and extrapolating what is essential for design. While this has obvious benefits for productivity and increased efficiency, freeing up this time will be key to more thoughtful, innovative architectural solutions, which will help propel the industry forward.

AI holds massive potential to disrupt and change entire industries – and this is especially true for architecture and design. By embracing AI technology thoughtfully and strategically, individuals and businesses can push the boundaries of what is currently possible, creating the buildings of tomorrow and providing huge value to the people who live, work and play inside of them.

We now have the opportunity to build AI solutions that operate as assistants to the designers on every step of their process. It is time to start embracing AI-powered solutions, especially in the planning stage of projects. This will provide designers and architects with the tools they will carry long into the future. ■



Humidity resilience in home design: strategies for UK Architectural Technologists

Words by Andy Mitchell, Managing Director, 21 Degrees

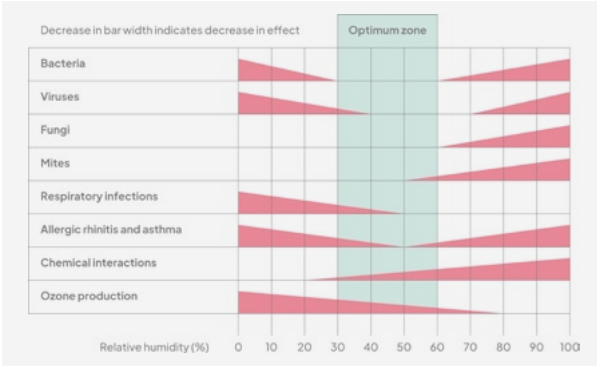
As climate change accelerates, the frequency of extreme humidity events is increasing, posing significant challenges for residential architecture in the UK.

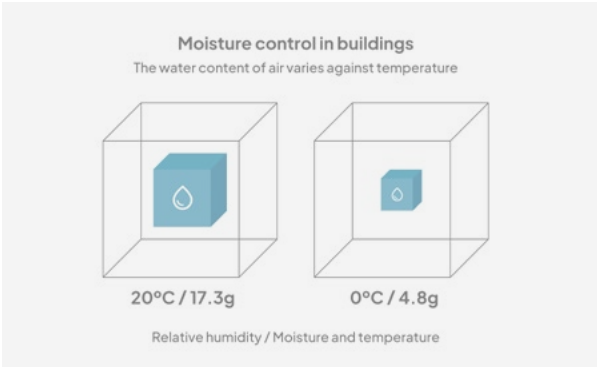
Recent insights from the Met Office's HadISDH.extremes dataset underscore the growing importance of humidity control in building design. To create homes that are not only energy-efficient but also provide a healthy and comfortable living environment, it is essential to incorporate condensation and humidity-resistant features into building design. And to do that, we need to first understand it.

Humidity is a relative measure, expressed as Relative Humidity (RH), which reflects the amount of moisture air can hold at a given temperature. As air temperature rises, so does its capacity to hold moisture. Conversely, when air cools, its relative humidity increases, leading to condensation when the RH reaches 100%. Condensation occurs because the cooler air cannot retain the same amount of moisture, which then precipitates onto colder surfaces – which was the cause of the air cooling – such as windows or walls.

Condensation is a common issue in residential settings, particularly on single and double-glazed windows, where the temperature difference between the air adjacent to the window surface is colder in winter months, resulting in moisture accumulation. Triple-glazed windows are more effective in preventing condensation because the additional pane of glass ensures that the internal surface of the window is warmer. This reduces the likelihood of reaching the dew point (the temperature at which moisture falls out of the air), so condensation is not formed. It is also worth noting that as humans we are much more sensitive to radiant heat than air temperature; colder surfaces make us feel less comfortable.

It is not just the temperature of the internal glazing that affects the RH and subsequently the levels of condensation. A high-performance window should be well-sealed to prevent the ingress of external air, which can introduce colder temperatures and create conditions conducive to condensation. By maintaining a consistent internal temperature, they help keep the relative humidity at optimal levels, reducing the risk of moisture-related issues such as





mould growth, which begin to thrive in environments where RH exceeds 60%.

High-performance doors are also particularly effective in this regard. These offer superior thermal performance, ensuring the internal pane remains warmer, which in turn helps maintain a stable indoor environment. This not only enhances energy efficiency but also contributes significantly to the comfort and health of the occupants by minimising condensation and the related risks of mould and mildew.

One of the most effective strategies to manage indoor humidity is integrating Mechanical Ventilation with Heat Recovery (MVHR) systems into residential designs. MVHR systems work by extracting stale, moisture-laden air from "wet" rooms such as kitchens and bathrooms, and replacing it with fresh, filtered air from outside. The system significantly reduces the relative humidity indoors, while improving air quality.

The key to MVHR's effectiveness to do this lies in its heat exchange process. As stale air is expelled, it passes through a heat exchanger, where around 90% of the heat is transferred to the incoming fresh air. This process not only helps maintain a comfortable indoor temperature but also lowers the RH of the incoming air, as the heat exchange reduces its moisture content. Additionally, the filters in MVHR systems can remove pollutants such as particulates and pollen, further enhancing the indoor environment.

During the summer months, MVHR systems should operate in a summer bypass mode, where the coolness of the building is preserved during the day and active cooling takes place at night when temperatures are lower, reducing the need for active cooling. Although less effective at controlling high RH levels in summer, this mode helps prevent overheating by maintaining lower indoor temperatures. The cooler nighttime air, often around 15°C in the UK, is drawn in and distributed throughout the house, aiding temperature regulation without adding excess moisture. To read more about MVHR systems, please see our article on page XX.

Effective humidity control in residential buildings goes beyond just technology – it requires thoughtful design strategies. In the UK, where moisture levels are naturally high, it's crucial to design homes that minimise the potential for excess humidity.

Another critical aspect of moisture management is educating occupants on how to reduce indoor humidity. Everyday activities such as cooking and bathing contribute significantly to moisture levels, adding as much as 9-15 litres of moisture into the air for an average family. This is why controlling the moisture levels through ventilation with heat recovery is so key if we are to minimise our energy use. Activities like drying clothes indoors also add significant levels of moisture into the air and should be avoided.

The challenges of managing indoor humidity in residential buildings will only increase as climate change intensifies.

Other measures can be taken to reduce the level of moisture in the air caused by daily activities such as installing a heat pump-enabled tumble dryer – which is inexpensive to operate – and ensuring that extractor hoods in kitchens are vented to the outside wherever possible.

To create a healthy and comfortable living environment, it is essential to maintain indoor RH levels between 40 and 60%. At these levels, the risk of bacteria, viruses, and dust mites thriving is minimised, reducing potential health hazards. Maintaining consistent radiant heat on surfaces, such as walls and windows, helps combat condensation by keeping surfaces warm enough to prevent moisture from settling.

The challenges of managing indoor humidity in residential buildings will only increase as climate change intensifies. By incorporating high-performance windows, MVHR systems, and thoughtful design strategies, architects and technologists can create homes that not only withstand the impacts of rising humidity, but also provide energy-efficient, healthy, and comfortable living environments. The future of residential architecture in the UK will depend on our ability to adapt to these new environmental realities, ensuring our homes remain sanctuaries from the increasingly unpredictable climate outside. ■

The removal of "beauty" from the NPPF

Words by Katy Davis, Planning & Development Partner, Carter Jonas (London office)

One of the most significant changes made in the revised National Planning Policy Framework (NPPF) is the removal of the word "beauty" from the title of Chapter 12.

The title, previously *"Achieving well-designed and beautiful places"* has been amended to *"Achieving well-designed places"*. Other than two words, what has actually changed in planning policy and how will this impact on development decisions the design quality of future homes?

Chapter 12 of the NPPF reduces, but does not entirely remove, references to "beauty" and "beautiful", and makes few other changes to this chapter otherwise, the chapter mostly referring to the process of applying the National Model Design Code.

Elsewhere in the NPPF, paragraph 20 removes "to ensure outcomes support beauty and placemaking" from the statement that "strategic policies should set out an overall strategy for the pattern, scale and design quality of places and make sufficient provision for housing, infrastructure, community facilities and conservation and enhancement of the environment". In Chapter 8 (*"Promoting healthy and safe communities"*) the words "and beautiful buildings" are removed from the phrase "Planning policies and decisions should aim to achieve healthy, inclusive and safe places". The following paragraph goes on to specify places "which are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of well-designed, clear and legible pedestrian and cycle routes, and high quality public space, which encourage the active and continual use of public areas" – but removes "beautiful" from this list.

Is this a dumbing down of design, with priorities shifting from quality to quantity of homes, along with a renewed emphasis on social and affordable housing?

Speaking to *The Guardian* shortly after the NPPF's changes were published, Secretary of State Angela Rayner said that proposed changes will not lead to "a load of ugly houses." Rayner defended the decision to remove the requirement for new homes to be "beautiful", claiming the word was preventing development and is too subjective.

On the point of subjectivity, I agree entirely. Planning is the opposite of subjective, being centred around objectivity and balance. The profession emerged as a set of rules

which, through a structured and rational approach, manage the varying, wide-ranging and ever-changing demands of land use. As professionals facilitating the provision of more housing and, crucially, more social and affordable housing, our role balances the social, economic and environmental needs within a clearly defined legislative structure. The term "beauty" was always going to be challenging to define and agree as part of a national framework.

It follows, therefore, that successful planning depends upon a strong and consistent legislative framework, the centre of which is the NPPF; it fails when that framework is weakened. And when this occurs, the supply of housing risks being reduced.

The basics of the planning system – what is permitted and how – have remained fairly constant since planning was "created" with the 1947 Town and Country Planning Act. At the other end of the spectrum, the role of the Secretary of State, with the power to overrule planning decisions, is much more precarious. The Secretary of State's veto – and specifically the previous Secretary of State's rejection of schemes on the basis of "beauty" – is subjective in the extreme: subject to political pressure, interpretation and even the personality of the individual minister.

So, are we likely to see a different approach under Labour? After two significant schemes were scuppered under the last government in relation to the nebulous issue of "beauty" (a 165-home development by Berkeley Homes in Cranbrook, Kent, and a 200-home scheme near Leamington Spa by AC Lloyd), it will be interesting to see how planning applications will fare under the new Government.

Prior to the election, Angela Rayner said that only "attractive homes" would be allowed in the party's building blitz, as she set out a series of indicative designs (modern versions of Victorian terraces and suburban) aimed at reducing local opposition to development. She promised an end to "identikit homes" and said that the 1.5 million homes Labour plans to build would include "only exemplary design with real character".

It is interesting, however, to note that the Government's "golden rules" for released green belt (or "grey belt") land don't reference design. The pledge, with features in the revised NPPF, stipulates three types of contributions that schemes on green belt land released for development should deliver. The first of these is that "at least" 50 per cent of housing provided by the scheme should be affordable, with an "appropriate" proportion for social rent (subject to viability). Secondly, schemes should deliver "necessary improvements" to local or national infrastructure and the provision of new or improved green spaces accessible to the public. For residential developments, new residents should be able to access good-quality green spaces within a "short walk of their home", whether on-site or through access to off-site spaces. No reference is made to the design of the built environment. And yet presumably it is in the green belt that design is most sensitive.

Balancing priorities is something that we, as planning consultants, grapple with in our everyday work.

In the past few years, many of us have been disappointed with the way that seemingly irrational decisions have undermined our profession and our output. The fact that professional advice and opinions based on quantifiable evidence are ignored makes a mockery of the objective and evidence-based principles that govern planning and provides the necessary new homes. With a new Government, and a new NPPF, we hope that objectivity can be restored to planning decisions. ■

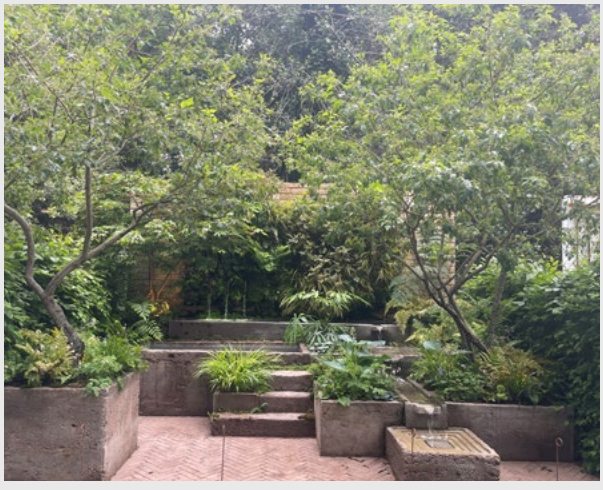
Microcosm of biodiversity in balconies and containers: minor design adaptations for considerable biodiversity benefit

Words by Anne Jennings FLI MBALI MCIHort, Associate Director of Landscape Architecture, Lanpro Services

Perhaps as a direct response to the availability of new apartment blocks, one of the most popular recent additions to the RHS Chelsea Flower Show has been the Balcony and Container Gardens category.

Balcony designers create gardens measuring only 5m x 2m on a podium surrounded by railings, mimicking the balconies on apartment blocks; while container gardens are created at ground level to the same dimensions, representing a small back yard or front garden. Never has the phrase “small but perfectly formed” been truer than in the presentation of these gardens.

There is proven positive impact in terms of holistic health when people have access to green space. For homeowners and residents, this extends to their use of personal outdoor areas, no matter how small. For many people, the option of a large garden is simply not viable. Indeed, in some cases it is not desirable due to upkeep demands and nervousness about the skills required to care for a fully planted garden. But container gardening provides opportunities to create green oases in even the most unpromising situations, and those evidence-based holistic health benefits of interacting with nature, can be enjoyed with minimal horticultural knowledge or experience.



By extending the ethos of green infrastructure led developments, even the smallest outside space within a residential development can help address the challenge of climate change and biodiversity loss. There are previously untapped opportunities to enable owners or tenants of new apartments to make best use of their balconies. Providing drainage is an easy fix in a new build and can avoid the nuisance of irrigation water dripping onto lower levels. Ensuring the structures can bear the load of fully planted containers is essential and for that reason, built-in planters could be incorporated into the construction design and installation.

Where only small rear or front gardens are provided, rug-sized patches of lawn are often laid over poorly prepared ground. It takes no time at all for this turf to deteriorate, leaving new residents with low-grade outdoor spaces that contribute nothing in terms of beauty, inspiration or ecological richness. Instead, we would recommend a permeable surface, with rustic bricks for a cottagey look, aggregate compacted into modules for a sunny area or resin aggregate for a sleek, contemporary finish, each providing a quality surface for pots and containers. An added bonus would be incorporating areas of drought-tolerant sedum lawns with permeable paths between. Again, built-in or installed planters around the boundaries would be a helpful contribution to new tenants or owners, and above-ground rain garden planters can support sustainable urban drainage systems (SuDS), slowing the pace of water run-off from roofs.

In terms of ecology, developers are required to deliver a minimum 10% net gain in biodiversity (BNG) for new projects. Ground level planters in amenity areas planted with shrubs and climbers do score on the BNG matrix and Urban Greening Factor calculations (albeit with very low value), whilst those in private spaces will not contribute to the matrix calculation at all. There is nevertheless significant ecological benefit in well-planted private

balconies and courtyards, providing food sources and habitats for birds and insects, and even small mammals and reptiles if suitable conditions prevail.

This also provides opportunity for developers to claim, with integrity, a best practice strategy for creating green spaces throughout the entirety of a project, providing another tool for those architectural proefessionals and developers who aspire to creating ecologically rich developments.

In terms of environmental responsibility, the property development sector faces huge challenges to achieve net zero emissions from construction projects. An essential factor in this is to move speedily toward green infrastructure-led developments where the networks of green spaces and habitats lead the design process, reversing the pattern of green interventions by simply filling the spaces left over from the building and road layouts.

Green infrastructure includes everything from macro interventions (woodlands, meadows, waterways) to micro ones (seed mixes, nectar rich perennial planting, climber clad walls). Balcony and container plants can be considered within the latter, even contributing to connectivity of green infrastructure when designed as integral elements of a development from the outset.

Few would disagree that any new development is at its best when it works in harmony with the natural environment, retaining a strong connection with nature and providing attractive open spaces that feature mature trees and hedgerows. Certainly, the big spaces provide more potential (and BNG reward), but the smaller pockets still have a role to play.

This presents another opportunity to bang the drum for greater collaboration between developers, architecture professionals, and landscape architects. We in the latter group have long been the last invitee at the table, arriving when the tasty courses have been devoured and left to pick at the last crumbs. Those days are – should – be behind us, with green-infrastructure-led developments being recognised as some of the best forms of development for humankind and wildlife.

It is easy to switch to leading with green infrastructure by working with landscape architects from the start and, given the opportunity, we will not only address the large open spaces within developments, but also explore every opportunity to create these precious pockets that so many homeowners – and wildlife – enjoy.

Who knows, perhaps one day we can aspire to the lofty heights of Tree House or Park Royal Hotel in Singapore in delivering vegetation-clad buildings that enhance urban street-scenes, increase biodiversity, reduce urban heat, and bring joy to residents and passers-by. ■

It is easy to switch to leading with greeninfrastructure by working with landscape architects from the start

In-depth technical engagement for aspiring designers at Ravago's Insulation Manufacturing Facility

Words by Joan Ferrer, Commercial Director UK & IRE, Ravago Building Solutions

Reflecting on my career trajectory, which began with an MSc in Chemistry and Food Science & Technology and evolved through an Executive Master's in Marketing and Sales, I understand how unexpected industry paths can be. Never once did I envision that I would find a fulfilling career in construction products.

This awareness has fueled my commitment to the Architects Academy Programme, an initiative by Ravago Building Solutions UK, designed to offer architecture students real-world exposure, going beyond theoretical training received in a lecture theatre. Through this program, we aim to illustrate the technical and practical intersections within architecture, engineering, and construction (AEC) industries, highlighting the diverse, advanced roles available within our sector.

Our first event welcomed Architecture and Architectural Technology students from Anglia Ruskin University to our UK manufacturing site in King's Lynn, where they observed firsthand the complex production process behind our Ravatherm XPS X insulation boards.

Beyond a basic plant tour, this experience provided technical insights into high-performance insulation manufacturing, detailing the precise methodologies and engineering innovations required to consistently meet rigorous thermal and structural performance standards.

The core of the day revolved around an extensive walkthrough of our manufacturing line, where students observed the intricacies of extruded polystyrene (XPS) insulation production, from raw material feed to finished board testing.

The tour showcased quality control processes and optimisation strategies crucial to consistently producing materials that contribute to energy-efficient, sustainable building designs. Our team elaborated on the thermal performance of XPS insulation, explaining how it contributes to the thermal building envelope and supports long-term durability in structural applications.

Further reinforcing the product's versatility, the technical team presented case studies demonstrating the integration of XPS insulation in various applications, from residential to commercial. This provided context on how advanced insulation solutions impact architectural design elements, support regulatory compliance, and enhance the lifecycle performance of buildings. For students, this perspective underscored the broader influence of material science in architectural design, beyond the superficial selection of materials.

Our commercial team, with over a century of combined expertise in insulation and building products, held a technical Q&A session and discussed the multifaceted career paths within the industry. The session spanned areas such as building physics, product development, sustainable architecture, and lifecycle cost management – demonstrating the breadth of impact from material selection.

Graham Terry MCIAT, Course Director of Architectural Technology at Anglia Ruskin University, and a professional with over 35 years in architectural practice, endorsed the program as highly valuable Continuing Professional Development (CPD) for both students and faculty, affirming its relevance in bridging theoretical knowledge with field application.

Ultimately, Ravago's Architects Academy Programme is about expanding aspiring architectural professionals' understanding of the construction industry's full scope, particularly as they prepare to enter a field that increasingly demands sustainability-driven design innovation. Exposure to the technical and operational aspects of construction product manufacturing will help equip these future professionals to make informed decisions that can push architectural boundaries.

We believe in encouraging architectural students to pursue varied and purposeful career paths, meeting established professionals who've navigated unique routes within the industry. Our hope is that through this initiative, students gain both the knowledge and confidence to explore the construction sector with an informed, innovation-driven mindset.

This inaugural event is just the beginning; we plan to extend the Architects Academy Programme, continuously inspiring students to envision their place within the evolving landscape of sustainable architecture. ■

Our hope is that through this initiative, students gain both the knowledge and confidence to explore the construction sector with an informed, innovation-driven mindset.

“If not now, when?” Marking 20 years of Chartered Environmentalists

Words by Phil Underwood, Engagement Manager, Society for the Environment

Imagine if thousands of Architectural Technologists were to showcase their externally verified environmental credentials, becoming the catalysts needed for a sustainable built environment. “If not now, when?” is the message from the Society for the Environment (SocEnv) to those wanting to lead the way.

Friday 20th September 2024 marked 20 years since the first Chartered Environmentalist (CEnv) certificates were signed. SocEnv itself was launched in 2002, with the aim of championing competence in environmental practices across sectors. Structure was highly important to allow accessibility along the breadth of disciples needed in a community making a collective difference. This resulted in an umbrella body. They formed partnerships with professional bodies already providing vital services to their members, rather than creating a new one. These alliances strengthened the environmental agenda within the cross-sector professionalism world.

The first objective was to create a chartered designation to professionalise this work – and so, Chartered Environmentalist (CEnv) was born in 2004 via a Royal Charter. One of the key reasons for this objective was to provide a platform to spearhead change. 20 years on and change is needed more than ever with the climate, biodiversity and environmental emergencies in full swing.

The first cohort of 65 CEnvs officially received their accreditation on the 20th September 2004. They established the community that is still growing today: now over 8,000 strong and leading the way towards a more sustainable future.

CIAT joined SocEnv in June 2008, providing the opportunity for members to achieve the CEnv registration. As a CIAT member, you have the opportunity to join the CEnv community and showcase your commitment to environmental good practice. Personally and professionally, it is a real chance to stand out from the crowd. Though doing fantastic work, less than 1% of current CEnv registrants hold their certificate via the CIAT pathway.

How much influence do you think Architectural Technologists should have on decisions impacting the environment? The number one benefit current CEnvs observe is the increased level of influence it allows.

“As a CIAT Chartered Environmentalist, the qualification demonstrates my advanced expertise and commitment to environmental management and sustainability in the built environment,” said Andrew Hole FCIAT CEnv, Director at Penton Architects. “I find it a pleasure working in partnership with enlighten clients Housing Associations, Local Authorities and others who really care about their tenant fuel poverty when retrofitting their stock and reviewing the comprehensive solutions in dealing with the individual project objectives. The approach to open discussions with customers and tenants is always beneficial and brings so much to the debate.”

Reflecting on 20 years of CEnv registration, SocEnv Chief Executive, Dr Emma Wilcox CEnv FIMMM CMgr, said: “CEnv registration has changed the face of professionalism for a global challenge – protecting our environment. I have no doubt that CEnv – and, more recently, REnvP and REnvTech – has amplified influence, trust, commitment, and change. The CEnv community also bridges knowledge gaps to drive innovation and quicken the adoption of good practice across sectors. This is the ideal opportunity to thank all our registrants for their hard work.

“But we share a vision with our registrants and partners for a sustainable future, which we are yet to achieve. So, if you are thinking about becoming a CEnv, leading the way and, playing your part, I ask – if not now, when?”

Continuing the theme of reflections, twenty CEnvs have contributed to a snapshot video series to articulate what CEnv means to them in just ten seconds. Take a watch via socenv.org.uk/20-years-of-cenv

Demand is growing for individuals who have the knowledge and experience to help solve some of the big environmental challenges of our time – globally and locally. The CEnv award is a demonstration of knowledge, expertise, commitment, and professionalism across all sectors that environmental professionals practice within.

Tara Page, Chief Executive of CIAT, said, “We need as many CIAT Chartered Environmentalists as possible to lead the way and work with SocEnv to help cultivate a lasting positive impact on the environment. Those involved so far are doing amazing things – my thanks to them. I can only imagine the kind of impact we will have when even more of our members put their hat in the ring.” ■

If you’d like to become a CIAT CEnv member, please go to **https://architecturaltechnology.com/membership/specialistregisters/chartered-environmentalist.html**

Review Corner

Our Deputy Editor reviews some of the most exciting and interesting literature for ATs from the last six months.

Building with stone wool insulated sandwich panels
by Marco Imperadori

Building with stone wool insulated sandwich panels: A technical guide for architects, developers and the supply chain is a dynamic and well-presented book by Prof. Marco Imperadori of the Politecnico di Milano and sponsored by ROCKWOOL Core Solutions. It highlights the sandwich panel as a construction technology that provides an answer to the multiple architectural challenges and opportunities in today's growing, more densely populated cities: namely in the need for sustainability and scalability, the construction skills gap, the increase of digitalisation and off-site manufacture, as well as the crucial, highly topical fire safety and energy efficiency.

There's a clear need in the built environment, the book argues, for technology to meet these challenges while supporting aesthetics and building performance for sustainable communities. It makes its argument in a well-laid-out and eye-popping manner, with informative and relevant diagrams, photography, tables and illustrations throughout, numerical index tabs lining the side so you can easily get to whichever chapter you need.

Beginning with a quote from Charles Darwin about adaptation, Imperadori describes today as the "new age of stone", arguing that stone wool is ideal for both retrofit and new architecture in any kind of building. He takes us through the properties of stone wool and sandwich panels, their in-factory manufacture and production, their transport and installation – from raw material to industrial product. There are large, comprehensive sections on sandwich panel application and manufacture as well, in which the diagrams really pop and take you through the process.

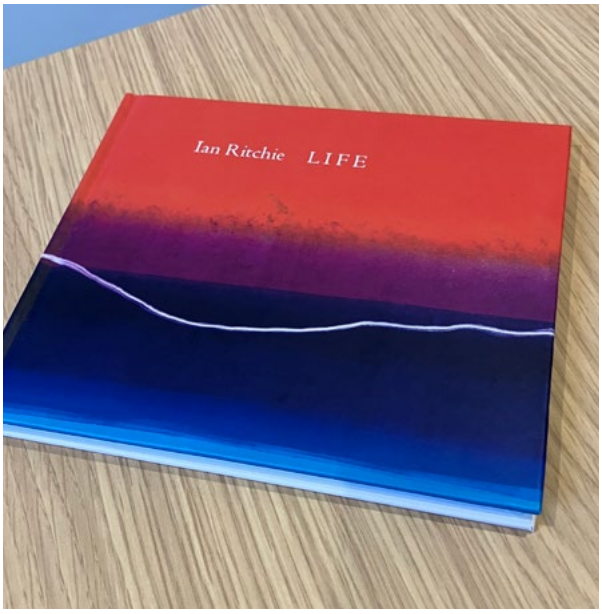
The book takes us through all the ways in which sandwich panels can be utilised as a product; or, as Imperadori puts it, "one material, thousands of applications"; taking us through its performance when it comes to thermal and acoustic insulation, durability, mechanical strength, water and air tightness, and fire resistance. This is immediately following by a chapter about the many sustainability credentials sandwich panels meet. If that wasn't enough to convince us this is indeed the "new stone age" – in addition to the case studies that end certain chapters – the book's penultimate chapter takes us through twenty case studies that feature stone wool insulated sandwich panels, providing inspiration and insight for ATs and designers.

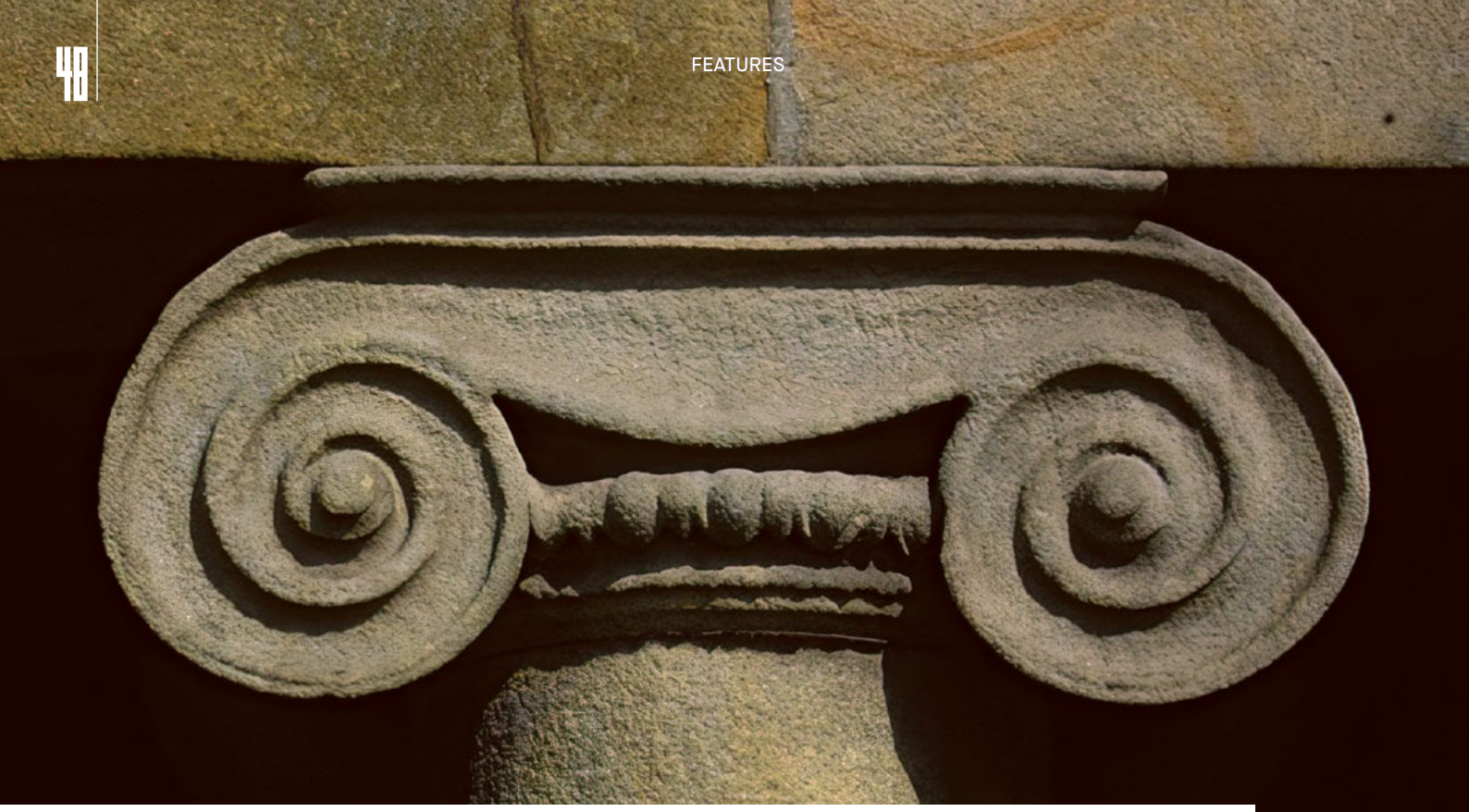
Prof. Imperadori wrote this book to fill a gap in the literature and, as the first book to focus specifically on this technology, he does a convincing job establishing the benefits of stone wool insulated sandwich panels and that they truly are important technology for the future.

Life
by Ian Ritchie

In renowned British architect Ian Ritchie's poetry collection *Life*, the author takes us on a personal journey through his life, from his youth to his over 50-year career as an architect, as well as expanding to musings on broader issues such as Covid, war, and climate change. It is the section on architecture, though, that will most interest our readers. Here, Ritchie rages against "Management Madness" in the industry that "allows arrogance without knowledge or experience" and causes a "mindless waste of money", as well as lamenting all the hard work that goes into architectural projects, only for people to ignore them, "walking straight past, / head down". He also criticises architects who have no "social belief / and a shallow sense of art", arguing that only when architects use their power to protect the environment can we have meaningful art: "Architecture without values / cannot reanimate the dead body."

Ritchie is far more accomplished as an architect than a poet; he often breaks the rhythm or form of a poem if it means he can better say what he wants to say, and he offers simple metaphors and rhyme schemes. But, for the AT, it is potentially worth a read as an insight into a visionary architectural mind with an urgent desire to use his skillset for the good of mankind. ■





“Every day’s a school day...” My experience at the RSUA Conservation Training Course

Words by Eamonn Cushnahan MCIAT, Director, Blackbird Architecture Ltd.

Early this year, I was appointed as Assigned Certifier on a Church Restoration & Extension scheme on the southern side of the Irish boarder. The scheme was at an advanced stage with the Planning Permission secured by the Lead Architect. Part of my role was providing comments on the drawings, in regard to compliance with the RoI Building Regulations. At the same time, I was on a journey learning about the world of traditional construction and the consequences of not recognising how its needs differ to those of modern construction.

We approached this review process, not to produce a snag list, but rather with a troubleshooting mentality. I had attended a CPD the previous year that discussed best practice for thermal upgrades and air tightness within historic buildings. The event was excellent and taught me that much of what was presented contradicted my outdated understanding of how to approach a Historic Building or tradition construction. The products, materials and systems presented were innovative, but came from a traditional, historic and scientific approach, and emphasised the importance of using suitable materials and proper hygrothermal analysis of the building fabric.

At Blackbird Architecture, we work on both sides of the Irish Boarder and are familiar with statutory processes and regulations in both jurisdictions. Our knowledge on work to Historic Buildings, on the other hand, was very limited. We had been involved with a few restoration projects in the past and been involved with several ecclesiastical new builds, but not Historic Buildings of this calibre.

A supplier in the sector encouraged me to reach out to Des Cairns FCIAT, who is a CIAT Accredited Conservationist, and a trustee of The Institute of Historic Building Conservation (IHBC), amongst other achievements.

I sent Des an email late on a Monday night and he called me the very next day. He encouraged me to start on the path towards becoming a CIAT Accredited Conservation and mapped out the process for me, following up with an email with helpful links. The first step was to complete the RSUA’s Conservation Training Course, which I signed up for straight away.

The course was one day a week for five weeks and was hosted by the retired Conservation Architect Marcus Patton OBE. The course location was at a historic building in Belfast

called Clifton House, which is some 250 years old, originally built as a Poorhouse, and is Belfast's oldest working building – a fitting location for the subject matter.

Attending the course was like being inside a live documentary with some of the most interesting and eccentric speakers you could imagine, with such specific expertise and experience in their very niche areas of work. A different module was covered each day, typically including three speakers each day, making the whole thing feel very fast moving. They covered their subject areas with the use of real case studies, and the buildings and structures which they referred to were well known to all – such as Parliament Building's Stormont, Albert Memorial Clock, The Guildhall Derry, Queens University Belfast (QUB)'s Lanyon Building, and Lynn Library at QUB. The imagery was beautiful and engaging. The survey methods were unconventional (such as abseiling!), the presentations were engaging and interactive, and discussion was always promoted by Marcus.

The professional language was always inclusive, which was very refreshing, especially considering this was an event organised by Architects for Architects. To be fair the RSUA's website says that the course is "aimed at architects and related professionals working in the fields of conservations, refurbishment and restoration" and goes on to say "but will be of equal benefit to technologists, planners and surveyors involved in conservation work". It was very refreshing to hear every speaker refer to Architectural Technologists specifically and more often used the umbrella title of Conservation Professional. Surprisingly, the term Conservation Architect was sparsely used.

The course attendees were mostly architects or Part 1 or Part 2 Architectural Assistants. There were, however, a few Planners and Surveyors. I was the only AT in attendance and felt very welcome and comfortable.

Two of the most interesting presentations were from a Conservation Engineer and Geologist. This is a sentence I never thought I would dedicate to writing! The case studies these gentlemen used were incredible. The Geologist was scanning the Marble Arch Caves one minute and a Church in Boston the next. The technology that he was using was impressive, and the drawings and 3D models it was producing were beautiful. Each case study location was more exotic than the last and the methods and equipment on each job seemed otherworldly.

The Structural Engineer's approach was unconventional and bespoke. His company had a contract with the Grand Opera House in Belfast. They were engaged to assess the thousands of plaster wad ties which support the ornate suspended ceiling in the main historic auditorium. There had been an instance in Britain where the combination of time, humidity and vibration in this type of building had contributed to large sections of the ceiling falling on the audience during a performance. The engineer produced detail drawing of the existing support system, which was very complex, and identified each individual wadding tie with a physical tag, recording this on a drawing. This allowed for each wadding tie to be assessed, and a report produced, which then allowed for the identification of those that required remedial work.

This course provided me with confidence and underpinned my knowledge, allowing me to explain and enforce my comments on the proposed specifications on the Historic Church. I was able to refer to guidance and various publications to give grounds for my initial comments and convince the Lead Architect to use the alternative systems and materials I suggested.

Several months before I got involved in conservation and attended this course, I had joined my local CIAT Regional Committee. In addition, I have built connections

in the neighbouring Committee in the Republic of Ireland Centre. To give a little context, I'm no spring chicken. I graduated from my degree some 18 years ago, became Chartered with CIAT some 15 years ago, I taught for some time in further education, and I've been a Director of my own architectural practice for 8 years. I suppose what I'm trying to say as I'm not green behind the ears, but this is a whole side of the industry I found to be totally enlightening.

As those who have operated in this field for a while will know, there is always something new to learn, for me that's what keeps it interesting. It can be liberating to allow ourselves to always be a work in progress. It is only when we accept that that we benefit most from the fresh eyes of a friendly critic, be that a mentor, an expert outside our own profession such as Declan Loane and the Ecological Building Systems Team, or a network of peers in our own field.

I commend the RSUA conservation course or an equivalent near you. As I've said, every day's a school day... ■

Photos: Des Cairns FCIAT

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Membership news

Chartered Architectural Technologists

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

038788	Carlos Molina Saurith	Yorkshire, 02
032791	Taylor Baston	East Midlands, 04
037919	Kieran Harvey	East Midlands, 04
019038	Sorwar Ali	West Midlands, 05
030786	Callum Jones	West Midlands, 05
030855	Joe Hyett	Wessex, 06
033257	Anthony Riddle	Wessex, 06
031087	Samuel Herring	East Anglia, 07
034514	Amy-Jane Lister	East Anglia, 07
033794	Jitesh Mistry	Greater London, 09
033874	Kristina Gluskova	South East, 10
038441	Nairn Gower	Western, 12
032818	Jonathan Spicer	Western, 12
038333	Ilanko Perinpanayagam	Middle East & Africa, C7

Welcome back

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

028170	Michael Cartwright	North West, 03
029206	Richard Clarke	North West, 03
016828	Graham Stevenson	North West, 03
024938	Dominic Skinner	West Midlands, 05
020561	David Mitchell	East Anglia, 07

Fellow Members

We would like to congratulate the following Member who successfully completed their application and is now a Fellow Member, FCIAT:

021493	AndrewJones	Wales, 16

Registered Principal Designer

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

018428	Alistair Milne	West Midlands, 05

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

021630	David Cooper	West Midlands, 05
018896	Hywel Davis	South East, 10

In memoriam

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

004803	Frederick Downing	West Midlands, 05
022551	David Taylor	East Anglia, 07
007455	Nicholas Godfrey	South East, 10
000961	Michael Lloyd	South East, 10

Save the date! 21-23 November 2025

CIAT celebrates its 60th anniversary in 2025 and to mark the occasion we will be hosting a 60th Anniversary Diamond Celebration in Dublin. It will be a weekend to remember with networking, the AGM and a special celebratory event. Further details on how to book will be available in the New Year. We hope you'll be able to join us as we reflect and look forward on the remarkable journey that both the Institute and discipline has had over the past six decades.

Exclusive Insurance Scheme For Chartered Architectural Technologists

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Who are CIAT Insurance Services?

MFL Insurance Group Limited and the Chartered Insitute of Architectural Technologists have worked together for over 25 years providing Members with bespoke insurance solutions specific to the work their members carry out.

What types of policies and services can you assist with?

We offer a suite of insurance products, claims and risk management services, 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?

We are a trusted partner who understands your profession. We assist CIAT Members on a daily basis, which enables us to maintain a comprehensive understanding of your profession and its unique requirements. Assisting CIAT Members provides us with a wider view of the risks, challenges, trends and new developments that may impact you and your business. Our experienced insurance advisors are on hand to assist you.

Do you assist Members of CIAT with claims?

Yes, we are particularly proud of our in-house claims service. Our experienced team, many of whom have a legal background, 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.

Are off-the-shelf insurance policies suitable for Members of CIAT?

Off-the-shelf insurance policies may not accommodate some of the unique risks and challenges faced by CIAT members. CIAT facility policies are developed exclusively for CIAT Members, with tailored coverage underwritten by Insurers on our behalf.

It's also important that CIAT Members receive suitable advice when purchasing their insurance policies. We often work with new clients who have inadvertently purchased policies with onerous terms and conditions that does not meet their requirements, or excludes retroactive coverage despite maintaining consecutive policies for a number of years. These errors can be costly for a Member in the event of a claim, so it's important that the right advice is provided from an experienced and trusted advisor.

We regularly test and benchmark premiums and cover alternatives to ensure that we consistently provide quality insurance coverage for a competitive premium.

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

We 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.

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Architectural Technology Journal

Issue #152 – Winter 2024