



INSIDE

- Back to the classroom
- University challenge

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New accessibility symbol?

WHEN A PLAN COMES TOGETHER

Architectural

Ironmongery

Journal

WINTER 2023

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A new GAI guide overlays the respected RIBA Plan of Work. What makes the Plan so effective and popular?

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EDITORIAL PANEL: Kaz Spiewakowski President Email: president@gai.org.uk

Simon Forrester Chief executive Email: simon@gai.org.uk

Marc Sanderson Head of marketing Email: marc.sanderson@gai.org.uk

TECHNICAL MANAGER: Douglas Masterson Tel: +44 (0) 7469 141657 Email: douglas.masterson@gai.org.uk

DESIGN AND PRODUCTION: Atom Publishing Tel: +44 (0) 20 7490 5595 www.atompublishing.co.uk

EDITOR: Nicky Roger Tel: +44 (0) 7704 336835

Tel: +44 (0) 7704 336835 Email: nicky.roger@atompublishing.co.uk

ADVERTISING MANAGER David Smith Tel: +44 (0) 20 7490 5595 Email: david.smith@atompublishing.co.uk

ART EDITOR: Heather Rugeley



Aparthotel opts for smart access



TOP: Your Apartment's latest and largest serviced apartment in Milton Keynes ABOVE: SMARTair met the access brief

Updates

Projects

Events

Standards

Abloy UK has supplied its SMARTair access control system to Your Apartment for its new aparthotel based in the centre of Milton Keynes. The system provides access for 65 one-bed and studio apartments and a gym.

Your Apartment is a rapidly-growing serviced apartment and aparthotel operator based in the UK. It has over 300 serviced apartments across Bristol, London and Milton Keynes with a tech driven and design-led approach. Your Apartment Milton Keynes is the company's largest property in its portfolio boasting 10,000 square feet. Co-founders – brothers Charlie and Toby Guest – said SMARTair matched their values. "Our mission is to create aparthotels with an emphasis on eclectic design, comfort and convenience, quality without compromise. We wanted to incorporate the latest technology as part of this, tailored to the needs of today's traveller."

Your Apartment required a flexible and integrated access control system that could grant access to residents, team members and contractors with the relevant credentials at the right time, with the added benefit of audit trails for enhanced security.

The building contractor approached Abloy UK for advice during the specification stage, and the SMARTair system was suggested, to offer wireless door entry and provide a detailed security overview of the building: who entered, where and when, in real-time.

With SMARTair, the facilities manager controls user rights and sets access limitations, time schedules and permissions calendars for different user groups,

The system is integrated with Openow, an app that opens doors using Bluetooth, meaning the user's mobile phone becomes a secure virtual key. Virtual keys can be updated over the air from anywhere and residents unlock a SMARTair-protected door by tapping the phone against a reader.

abloy.com/gb/en/products/wirelesslocking/smartair

Challenging clifftop location calls for new masterkey solution

The Minack Theatre is an open-air theatre, balanced on the cliffs high above the Atlantic Ocean in Porthcurno in Cornwall. Built primarily in the 1930s, the theatre is carved into the granite cliffside offering a panoramic backdrop for theatrical and musical performances throughout the summer months.

It presents a challenging environment for facilities teams to handle in terms of security and access control. and a recent masterkey system based on the ABUS Zolit cylinder has made life simpler for the Minack team. It now has a single masterkey to cover the whole site from outbuildings and concession stalls to the main public and staff entrances.

The theatre brought in local architectural ironmonger JEB Supplies to plan and install a single masterkeyed system across the whole site including padlocks for gates and outbuildings as well as the main customerfacing areas. The position of the site meant that the system had to be able to withstand a harsh marine environment without loss of function.

The ABUS masterkey system installed includes Submariner 83WPIB/53 Padlocks, a range of products designed specifically for challenging environments; it is regularly used on North Sea wind farms.

Manufactured in an all-stainless, it features a ball-bearing locking mechanism, providing a marked advantage over traditional spring-loaded systems in terms of weather resilience. The Submariner's design incorporates a sealed body, a key guard, and ultra-tight shim guards on the shackle to minimise exposure to the corrosive elements. Engineered for scenarios where rust prevention is critical this padlock is ideal for environments subjected to salt water and other corrosive conditions. www.abus.com

BELOW: ABUS padlock (inset) at the Minack Theatre



RIBA introduces more robust CPD

The Royal Institute of British Architects (RIBA) has announced changes to continuing professional development (CPD) for its chartered members.

Members are already required to undertake and record CPD, but from 1 January 2024 RIBA will now check that every member has an up-to date online record, rather than auditing a random sample.

The changes are aimed at ensuring and demonstrating that RIBA members meet the highest professional standards and are equipped with expertise in crucial areas such as building and fire safety, climate literacy, legal and regulatory compliance, and inclusive design. **RIBA has published information and guidance for members on its website: architecture.com**



SDS consolidates under one roof

SDS London Ltd, a provider of architectural ironmongery and hardware solutions is moving from its Northcote Road Showroom – where it has been for over 40 years – to its Wimbledon base, home to its warehouse and offices. The Northcote Road premises (above) played an instrumental role in the firm's history, with many of the team beginning their careers behind the counter, including the sales director, Simon Ayers.

Ayers says the decision to relocate to Wimbledon will enable SDS to streamline operations and offer an even more seamless experience to customers and clients. **SDSIondon.co.uk**

Unlocking the future

Colin Campbell explores current trends shaping access control



ABOVE: Self service in shared spaces is on the rise

The access control market is growing,

set to be worth \$12.1bn by 2024 and the technology is developing at a rapid pace. One of the biggest trends shaping access control moving forward is the growing market of niche rental spaces. The rental market has continued its growth, post pandemic, with all manner of services and collections being offered via lockers, rooms or whole buildings for a short or temporary period of time.

This trend is being a driven by a number of factors. Changing behaviours have led to the rise of shared spaces like coworking hubs or co-livings, and increasing digitalisation means users are demanding self-service applications and automated access control. Of course, there's an important commercial driver too. Businesses are interested in how they can manipulate spaces to offer a service and rent it out time and time again to generate repeat revenue. Increasingly, in the niche rental market, we see subscription-based payment models where users will pay a rental fee per month to access a specific service.



The development of new cloud-based technology and API solutions is at the heart of enabling this sort of smart access control to work successfully. Moving forward, the industry is investing, innovating and developing its solutions to address this market. For example, at Codelocks, we are exploring the longevity of battery life to last the lifespan of the product, reducing battery changes and associated waste. In the future, I think we'll see serious innovations in how we can power electronic access control systems, from ambient light technologies to harvesting energy from buildings to run smart locks more sustainably.

Sustainability and compliance is another key trend influencing the future of access control. Like every industry, the access control sector is grappling with its carbon emissions, net zero targets and putting effective strategies in place to minimise its environmental impact.

The rise of circular economy will influence the access control sector with a shift in the throwaway mentality. To avoid waste, customers will opt for quality access control products that stand the test of time rather than cheaper solutions with a short lifespan.

Overall, technological innovation, societal shifts, evolving security needs and the growing importance of sustainability will continue to influence where the industry is heading.

Colin Campbell is managing director of Codelocks. This article is an extract from a longer piece that can be found at aijmagazine.com

LEFT: Rental work spaces will drive trends BELOW: All kinds of businesses need smart access solutions



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10 reasons to belong to a trade association

Trade associations have never been more important in the built environment sector. Here are just 10 of the reasons why associations – and association membership – makes sense for every business. In the built environment sector the role

of trade associations has never been more important. The shifting sands of legislation and the need for demonstrable competency means having a single voice that can impart influence and raise the bar of best practice on behalf of an entire sector is critical.

The Trade Association Forum puts it this way: "Trade Associations build industry consensus and drive up standards. They are the industry leaders, technical experts and the fearless champions of their sector."

Of the GAI 's role, chief executive Simon Forrester says: "The GAI supports, assures and represents the companies and individuals in this sector, and delivers the only learning programme that leads to qualifications in architectural ironmongery to British and European standards.

"We also have a long history of effective lobbying on behalf of our members' interests, and offer huge member value through our benefits and services packages. By doing all this, the Guild is contributing to the growth and success of all our member businesses." Advocacy and Representation:

Trade associations serve as the voice of their industry, advocating for their members' interests with governments, policymakers, and regulatory bodies. They lobby for favourable regulations, laws, and policies that benefit the industry.

Networking Opportunities:

They provide platforms for networking, allowing members to connect with industry peers, share knowledge, exchange ideas, and establish business relationships. These connections often lead to collaborations, partnerships, and business opportunities. The GAI, for example, has a network of regional Community Hubs at the heart of its membership and community strategy.

3 Technical resources:

Trade associations offer access to industryspecific technical information, research, and resources. This knowledge can be invaluable for making informed decisions and staying updated on the latest developments in the field. Supporting the GAI's website Knowledge Base and regular email updates is a unique technical hotline which answers hundreds of specific queries for members every year.

Education and Training:

Many associations offer training programs, workshops, seminars, and conferences designed to educate members on industry best practices, new technologies, and skill development. This continuous learning is crucial for professional growth and staying competitive. Last year the GAI trained 369 students from 23 countries on its education programme; delivered its 100th webinar and ran 55 CPD sessions.

Standardisation and Best Practices: They often set industry standards and best practices, ensuring that members adhere to common guidelines, which can enhance product quality, consumer safety, and industry reputation. The GAI is at the forefront of the industry's response to the competence agenda, such as through the recent revisions of its CPD programme, and the expansion of the GAI Registered Professionals scheme to include new specialisms in door system, electric hardware and access control.

6 Cost Savings:

Trade associations can negotiate group discounts on essential services such as insurance, legal counsel, or other business-related needs, providing cost savings to their members. GAI services include energy and sustainability consultancy, and business support covering HR, taxation, legal and health & safety matters.

T Industry Promotion

They work to promote the industry as a whole, raising public awareness about its importance, innovations, and contributions to society and the economy. The GAI works extensively with specifiers to raise awareness of professional competency and the role of the GAI Registered Professional, and is currently planning work in the education sector to encourage more young people into the industry.

Crisis Management and Support In times of crisis or industry-specific challenges, trade associations can provide support, guidance, and a collective response to address these issues. 2023, for example, saw the GAI mount an effective response to UK Government proposals for fire door testing, arguing that while there was no evidence to suggest that the changes would make fire doors any safer, they would cause significant damage to the "Trade Associations are the industry leaders, technical experts and fearless champions of their sector" TRADE ASSOCIATION FORUM

UK's world-class architectural ironmongery industry and problems throughout the design and construction sectors.

Standards and regulation Trade associations inject both technical expertise and real-world experience into the development of new product standards and regulation. In the past 12 months alone, the GAI has represented the industry on 10 International and European Committees (including ISO and CEN), as well as 24 BSI committees).

Market Information and International Opportunities

Associations can assist members in understanding existing markets and access new ones, with market intelligence, research, export initiatives and trade missions. As a member of the Construction Products Association, for example, the GAI provides members with access to vital state of trade reports and construction industry forecasts.





Is it time to get back to the classroom?

Why face-to-face can be more effective than online for learning

Lockdowns thrust us all rapidly into a

world of Zoom and Teams, a normal that has remained. We operate in a working world of online meetings, webinars and video training. However, with the rise in mandatory CPD and the demand to prove competence, questions are starting to be asked around the value of online learning compared to classroom settings. With online learning are people merely going through a tick-box approach? Are they really engaged? Are they getting value for money? Are they missing out on the benefits of immersion into a learning environment? Andy Mackie, managing director at construction software provider, Causeway Enhance, said they have seen an increase in the number of specifiers accepting faceto-face CPD presentations. "The majority of the 120 CPDs we scheduled in July were held at the offices of architects, consultants, design & build contractors, NHS Trusts, and Councils. Our CPD clients expressed that being in a room with people has a significant impact on networking and building stronger relationships with others in the industry. It allows for a more fluid CPD too; face-to-face meetings and presentations allow **>**

"The majority of our 120 CPDs in July were held at offices. Clients expressed that being in a room with people has a significant impact, building stronger relationships with others" **ANDY MACKIE**



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Call us on 0121 459 2358 instincthardware.co.uk the presenter to judge the energy in the room, creating an interactive atmosphere that improves a dynamic exchange of ideas and collaboration."

Multiple benefits

The value of classroom learning is not just about improved engagement. The benefits are many:

• Immediate feedback and interaction. In a classroom setting, immediate feedback and interaction are more readily available. Trainers can address questions and concerns on the spot, facilitating a deeper understanding of the material. Moreover, the physical proximity of an in-person learning environment also enables more effective non-verbal communication. A trainer is able to read a trainee's body



"This year the three top medal winners all attended a classroom training course. Year on year it is around 85% pass rate for those attending the classroom training" **RACHEL TIPTON** language to determine whether they are struggling to understand the course material and can adapt their approach to produce better learning results for the class. Plus, discussions and peer interactions can lead to a richer learning experience.

• Hands-on activities and demonstrations. Certain CPDs benefit greatly from hands-on experiences or physical demonstrations. .

• Building a learning community. Classroom settings provide a sense of community and collaboration among students. This atmosphere fosters teamwork, discussion, and social skills development. In a recent study by Oxford Learning College, 45.6% of students cited 'missing out on social interactions' as their reason for not liking online learning.

• Reduced distraction. For some learners, being in a physical classroom environment helps eliminate distractions that might be present at home or in other online learning environments. It creates a dedicated space for learning.

• Accountability and discipline. Being physically present in a classroom setting often instills a sense of responsibility and discipline. Students are more likely to stay engaged and focused on the material being taught.

Proof of the pudding

Rachel Tipton, the GAI training and development manager, has the figures to back up these findings. Speaking of the GAI Diploma students she says: "This year the three top medal winners all attended a classroom training course, and we had the same strike rate last year. Year on year it is around 85% pass rate for those attending the classroom training."

She adds: "It is also a great opportunity to work with industry experts and members of the Education Committee whose knowledge is shared throughout this three day classroom training course. What is extremely valuable is the mock



examination and experience of what a four hour examination really does feel like."

Elena Dominguez Perez, winner of the silver GAI education award for the Diploma in 2022, said the classroom experience was invaluable. Asked what advice she'd give to other Diploma students she said: "Take the classroom course, especially if you are not from the UK. It was the most important step for me: I had lots of 'aha!' moments with topics I did not understand learning at home and got to know a great group of people from all over the world. We learned from each other during and after the classroom training."

Jessica Calpin won the Pinnacle award in 2021. Talking about her experience of studying for the Diploma she said: "Specifying hardware for doors was utterly new to me. I knew nothing. I wasn't from one of the large companies surrounded by people with experience and knowledge. But the turning point was when I attended the three-day classroom course. After that I felt much more confident and determined."



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A cunning plan

The GAI's latest guide for architects and designers overlays the RIBA Plan of Work. But what is the Plan of Work and why is it important? **AIJ** reports

The GAI has launched a new guide:

The Architect + Designer's Guide to Architectural Ironmongery. It is based on the RIBA Plan of Work which is a highly-regarded and widely-used framework for the planning and management of architectural projects. Published by the Royal Institute of British Architects (RIBA), it is an essential resource for architects and other construction professionals, providing a structured approach to project planning, design, and management.

In a world now defined by competence and ethics, digital innovation, safety and compliance, the Golden Thread, accountability and sustainability, the Plan of Work has never been more relevant. Why? It encourages collaboration between project stakeholders; it provides a clear roadmap for project management and delivery; it is adaptable to various project types, scales, and procurement methods; and it promotes the use of industry best practices and standards.

Many architectural ironmongers will never have been introduced to the RIBA Plan of Work and view it as a tool for architects. However, it is an excellent resource for ALL designers and specifiers. One leading interior design professional body holds it in such esteem it has now based its design contracts on the Plan of Work. And the GAI has based its latest guide to AI on it. RIBA says in the introduction to its Plan of Work Overview 2020: "Of course, any client is welcome to interpret the RIBA Plan of Work in their own way and to set their own overlay of tasks or documents. In a world of continuous change, bringing clarity to each stage allows everyone involved to develop their own innovations, without the perpetual need to discuss the strategic aspects of who should do what when."

"Stages 3 and 4 are when the architectural ironmonger's role becomes significant in specifying the required products, considering functionality, aesthetics and standards compliance"

The eight stages and the role of the architectural ironmonger

The RIBA Plan of Work is divided into distinct stages, each with specific tasks and objectives. The eight stages, numbered 0 to 7 each represent a phase in the project lifecycle and is designed to ensure that all aspects of the project are considered and addressed.

GAI members might like to take note of stages 3, 4, 5, 6 and 7 (although early involvement ensures that the ironmonger's expertise is considered in the project planning). Stages 3 and 4 are when the architectural ironmonger's role becomes significant in specifying and detailing the required ironmongery products, considering functionality, aesthetics, building regulations, and standards compliance. It also involves securing the order for the specified ironmongery product.

Stage 5 involves the supply of hardware and material that have been procured, according to the contractor's delivery programme. It also involves the architectural ironmonger working closely with the contractors to ensure that the specified ironmongery is installed correctly. This might involve conducting site visits, quality checks, and ensuring compliance with the





THE RIBA PLAN OF WORK FIGHT STAGES



RIBA Stage 0: Strategic Definition

In this stage, the project's objectives, constraints, and requirements are defined. Stakeholders are identified, and their needs and expectations are considered.



RIBA Stage 1: **Preparation and Brief**

The project brief is developed, outlining the client's requirements, project scope, and key performance indicators. A feasibility study may be conducted to assess the project's viability.

RIBA Stage 2: Concept Design

Initial design concepts are developed, and the preferred design solution is chosen. This stage includes preliminary cost estimates and risk assessments.



RIBA Stage 3: Spatial Coordination

The chosen design concept is developed into a coordinated architectural, structural, and services design. This stage includes the preparation of planning applications, building regulations submissions, and detailed cost estimates.



RIBA Stage 4: Technical Design

Technical details are finalised, including specifications, schedules, and drawings. The design is coordinated with other disciplines, and any necessary adjustments are made.

RIBA Stage 5: Construction

The project is constructed according to the technical design, with regular site inspections and progress reports to ensure quality and compliance with the design.



RIBA Stage 6: Handover and Close-out

The project is handed over to the client after construction. Any defects or issues are rectified, and final documentation is provided.



The performance of the completed project is monitored and evaluated. Feedback is collected to inform future projects and improve the design process

"Significant for architectural ironmongers, the guidance includes core project strategies: cost, fire safety, inclusive design, plan for use and sustainability"

initial design intent. In stages 6 and 7 an architectural ironmonger might still be involved in providing maintenance advice, servicing existing hardware, and offering guidance on any issues that may arise with the ironmongery in the building

In 2020 RIBA published an Overview, the result of gathering feedback from the construction industry on the Plan of Work to ensure it keeps pace with industry change.

This intelligence-gathering and listening exercise resulted in several tweaks to the Plan and the accompanying guidance, to bring greater clarity and resolve ambiguities. Some of the trends observed - for example, the scheduling of specialist subcontractors' design work at Stage 5 - are a consequence of the RIBA Plan of Work 2013 being interpreted differently than intended. Also significant for architectural ironmongers, the guidance includes core project strategies: conservation, cost, fire safety, health and safety, inclusive design, planning, plan for use, procurement and sustainability.

With the advent of more complex design processes – influenced by factors like new procurement forms, modern construction methods, and fresh drivers like sustainability and maintainability the need for a defined process map is essential to provide crucial guidance. For architectural ironmongers the RIBA Plan of Work essentially provides a structured process for them to align their services >



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ABOVE AND BELOW: The Architect + Designer's Guide to Architectural Ironmongery informs architects about best practice in specification

and expertise with the various project stages. It helps ensure that the ironmonger's contribution is integrated effectively into the overall construction process, from the initial design stages to the completion and postconstruction phases.

RIBA considers its Plan of Work and the 2020 Overview to be future-proof. It says: "While the RIBA acknowledges that major transformations in the way buildings are briefed, designed and constructed are upon us, it is not anticipated that future innovations will alter the RIBA Plan of Work methodology. The RIBA Plan of Work is proving resilient to the changes happening around it. Regardless of the innovation happening it will continue to be an invaluable tool for those involved in the briefing, design, manufacturing, construction, maintenance and use of buildings."

Find the RIBA Plan of Work and the 2020 Overview at RIBA's website architecture.com

An online quiz based on this feature is available on the GAI learning Hub. Completion of this quiz is worth one CPD point. https://learninghub.gai. org.uk/totara/dashboard/index.php

THE ARCHITECT + DESIGNER'S GUIDE

The GAI's Architect + Designer's Guide to Architectural Ironmongery is designed as an overlay to the RIBA Plan of Work. It brings together all the information architects need to make the specification process run smoothly and achieve the best possible outcome.

The Guide overlays each of the eight stages detailing how ironmongery sits within that stage offering guidance on what needs to be considered and best practice processes. At the first two stages of pre-design it advises paying due diligence to competence, standards and technical considerations in the areas of architectural ironmongery, such as the importance of using a GAI Registered Professional.

At design stages 3 and 4 the guide explains the need for a detailed brief and what that brief should contain in order for the AI to schedule appropriately. It also explains the impact of not providing that information which can affect safety issues and handover hiccups.

At stage five the guide warns of changing spec issues and the risks



that brings; and for stage 6 (handover) it stresses the importance of supplying correct product information before finally advising on the role of architectural ironmonger in the ongoing use of the building.

By using the guide architects will be fully informed about all the critical issues surrounding specifying architectural ironmongery: from the importance of using a registered professional and what makes a good brief, through to the role of EPDs, issues around specbreaking, value engineering, fire doors and other technical details. The GAI guide is available at www.gai.org.uk/Specifier, or see p.30 for more details.



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University challenge

The refurbishment of a historic hall at University of St Andrews presented a complex brief for doors and access control. **AIJ** reports

ABOVE: St. Andrews University

A trio of leading industry names

collaborated to provide the University of St Andrews with a compliant access control solution for the refurbishment of Younger Hall. Younger Hall is the main venue for graduation ceremonies at the University, located in the centre of St Andrews. It is named after James and Annie Younger, local philanthropists and benefactors of the University.

It was designed by English architect Paul Waterhouse, built in the 1920s. Its design combines aspects of Neo-Classical and Art Deco styles, and the hall was recently renovated as part of a £12m project.

The project had several requirements, including matching the existing traditional doors with both non-fire and fire rated doors, along with compliant access control ironmongery. Abloy UK, Aspex and Johan Doors supplied the solutions.

The specification was challenging, as what might work from an ironmongery

perspective and user functionality may not offer the best lifespan of the doors. Due to the historic nature and design of the building, the University was not able to use the standard Abloy EL560 locks normally specified on campus for the external doors.

The quality and design of the internal doors was to a very high standard, creating a challenge to install the cabling required for electric locks. There was also the added pressure that the heritage aesthetic needed to be retained, and there was no standard size of any internal or external door.

The external double leaf doors presented the most difficult part of the project, as they were extremely narrow, and the options considered would not work on this particular application.

Aspex worked closely with Johan Doors and Abloy to offer compliant installation on double doors that had a narrow leaf. Abloy proposed the PE590 motor lock with a PBE002 panic bolt. This configuration allows for the panic bar to be cut to suit the reduced width of the doors, providing a compliant and safe solution for these doors.

The correct specification and finish

Most of the doors in Younger Hall had been in place since the 1920s, and one side of the building was more exposed to sunlight. This had caused the doors on this side to drastically fade more than the other side, and the doors which sat centrally were a darker tone. The ironmongery specified also needed to meet current building regulations and practicality for everyday use, while considering the heritage surroundings and volume of people visiting the building.

To get the correct finish, Johan Doors used solid walnut, and after several samples they found a stain to use on certain locations along with frames and detailed architrave. Johan Doors prepared the doors and supplied Abloy compliant satin brass levers to complement the walnut door finish, which were installed by Aspex along with the compliant Abloy locks.



As a heritage project, doors had to blend with the existing appearance of the environment. The design had to be carefully considered to also allow for the positioning of panic bars or electric locks while mirroring the doors already in place, without compromising safety considerations in terms of mounting heights and operation.

Doors requiring electric locking had to be manufactured to allow for electrical

ABOVE: panic bar cut to suit the door width BELOW: Walnut finish, satin brass and compliant locks all part of the solution



"The refurbishment was no ordinary capital project for the University. Maintaining the integrity and historic nature of the building was critical" **PAULINE BROWN**

wiring from the Abloy lockcase through the centre of the door, into the concealed door loop and through the frame.

Although this is quite simple on a flush door, on a solid mortice and tenon door with joints and panels, quite a lot of detail and drawing is required ahead of manufacturing to ensure the longevity of the doorsets.

Heritage combined with technology

Louie Woodland, director at Johan Doors Ltd, explained: "We all wanted to give the best result for the contractor and end client, so being open minded was essential to working collaboratively, and pulling together to ask, 'how do we get this done?'

"We have had great feedback from the estates project manager in charge of the Younger Hall redevelopment. The need for heritage doors combined with technology has never been greater; it's a beautiful traditional building, and yet the heritage doors with modern technology does not look out of place."

Pauline Brown, associate chief information officer, University of St Andrews, commented: "The refurbishment of Younger Hall was no ordinary capital project for the University. Maintaining the integrity and historic nature of the building were critical, right down to the detail of the ironmongery. We're so grateful to Aspex, Abloy UK and Johan Doors for working together to find appropriate solutions that continued to meet our requirements."



The blame game

Who is responsible when passive fire protection fails? **Louise Frost**, discusses the accountability issue

In the construction industry, passive fire

protection (PFP) is of paramount importance. Serving as a critical line of defence, PFP aims to restrict the spread of fire and smoke, thus safeguarding both human lives and property. However, when PFP systems fail, the consequences can be devastating. This gives rise to complex and contentious issues of accountability.

What is passive fire protection?

Passive fire protection includes a variety of architectural and structural elements such as fire-resistant materials on structural beams, fire doorsets, cavity barriers, and fire-stopping compounds. The dual objectives of PFP are to provide occupants with a safe evacuation route during a fire and to minimise property damage.

Effective PFP can gain crucial time for the occupants to evacuate and for fire rescue services to contain the blaze.

Key stakeholders in accountability

When passive fire protection fails, the stakes couldn't be higher. Lives are at risk, property is in jeopardy, and the aftermath can be catastrophic.

Let's take a look at the key stakeholders in the battle for accountability:

- Building owners. They are often the first point of accountability as they are responsible for ensuring their properties meet safety standards.
- Architects and designers. The efficacy of PFP depends heavily on how a building is designed. Architects and designers may be held accountable for failures related to poor planning and design.
- Contractors and builders. Those executing the construction are accountable for using materials and techniques that comply with regulations.
- Regulatory authorities. These agencies set building codes and fire safety standards. If





"The ultimate aim should be the prevention of PFP failures through stringent regulations, education and ethical decision-making" LOUISE FROST

regulations are ambiguous or not enforced rigorously, PFP effectiveness suffers.

Manufacturers. Companies that produce PFP products must adhere to safety standards, or they may be liable for failures.
Occupants and users. Sometimes the occupants may be accountable if their actions or negligence contribute to a fire.
Employers. Under the Regulatory Reform (Fire Safety) Order 2005, employers can also be held accountable for fire safety.

Factors complicating accountability

Regulatory ambiguity: frequent updates and regional variances in regulations can result in unclear compliance requirements.
Human error: mistakes can happen at any stage of construction, often involving multiple stakeholders, making accountability difficult to pinpoint.

• Ageing infrastructure: as buildings age, PFP measures can deteriorate, raising questions about who is responsible for upkeep.

• Cost-driven decision-making: financial constraints can lead to compromises in PFP measures.

• Lack of oversight: inadequate inspections and maintenance contribute to PFP failures.

Legal precedents

Cases like the MGM Grand Hotel fire in Las Vegas in 1980 and the Grenfell Tower fire in the UK in 2017 highlight the complexities of assigning accountability. Legal battles set significant precedents, influencing how responsibility is determined in future cases.

Preventive measures

To promote accountability and enhance safety, several steps must be undertaken: • Stringent regulations. Regularly

BELOW: Fire doorsets are part of passive fire protection

updated and rigorously enforced regulations are essential.

- Education and training. Professionals involved must be thoroughly educated about fire safety and PFP.
- Regular maintenance and inspections. These should be a priority for building owners and responsible persons.
- Ethical decision-making. Life safety should never be compromised for cost.
- Industry collaboration. All stakeholders should collaborate to create best practices.

The debate over accountability in PFP failures involves a multitude of stakeholders and complex factors. While settling these disputes is important, the ultimate aim should be the prevention of PFP failures through stringent regulations, education, and ethical decision-making.

Louise Frost (pictured), is senior marketer at Door Controls Direct. A longer version of this article appears on AlJmagazine.co.uk







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Dear GAI...

I have heard that there is the potential for the current international accessibility symbol to be replaced – is this true and if so how can we respond to this? **Douglas Masterson** answers the question





ABOVE: The current wheelchair symbol

"This potential change would have a huge impact on all, not just those who are disabled"

It is true that there is an ongoing debate

relating to the potential replacement of the accessibility symbol (currently depicted by a wheelchair) with a new symbol which would be seen as more inclusive. One of the drivers for the potential replacement of the existing wheelchair symbol is that some people who have a genuine need to use accessible facilities can often be challenged by members of the public because their disability is non-visible.

The GAI is currently working with the BSI Public information symbols committee, PH/8/2, to assess public and industry opinion on the international symbol for accessibility (currently depicted by a wheelchair) and the potential for it to be replaced by a new symbol.

Current symbol

This potential change would have a huge impact on all, not just those who are disabled and ambulant disabled and who use the accessible facilities, but wider society who would need to be educated in the change should it occur. In addition to this, those who manufacture and specify the relevant signage would be affected hence the specific interest in this issue by the GAI.

International competition

The International Union of Architects (UIA) and Rehabilitation International (RI) jointly invited submissions in 2022 for a 21st-century symbol of accessibility to represent their core values of rights and inclusion, independence, physical and virtual accessibility for all, including people with disabilities. The intent would be for this new symbol of accessibility to better represent the variety of people who use buildings and other types of built environments. It would therefore replace the existing accessibility symbol which currently depicts a wheelchair.

The competition invited professional architects and graphic designers as well as architectural and graphic design students to design a new graphic symbol of accessibility, to be proposed to the International Organization for Standardization (ISO) for adoption as the new international symbol of accessibility.

The winning entry of this competition was created by Ukrainian architect Maksym Holovko and was judged to be "easily recognisable, demonstrating originality of form while indicating an openness, simply and powerfully conveyed using basic shapes and principles". This symbol has now been proposed to ISO Committee TC 145/SC 1 for inclusion in a future amendment to ISO 7001:2023 – Graphical Symbols, This is the standard which is generally applicable to public information symbols in all locations and all sectors where the public has access. It is important to note that whilst this new symbol has been proposed to this ISO Committee, it has not yet been accepted and the views of key stakeholders are being invited on this important issue. The closing date of the survey is 19 January 2024.

"Easily recognisable, demonstrating originality of form while indicating an openness, simply and powerfully conveyed using basic shapes and principles" **Iso**

BELOW: a proposed new graphic symbol of accessibility



SURVEY

GAI and ISO UK Mirror Committee PH/8/2 are seeking the views of industry through an online survey: www.gai.org.uk/GAI/ News/News-Items/2023/ Replacing-the-accessibility-symbola-GAI-survey.aspx

Questions asked include the following:

Do you feel there is a requirement to replace the current accessibility symbol?

What do you see as the key impacts on society including the general public, should the current symbol be replaced?

What do you see as the key impacts on industry, should the current symbol be replaced?
Having seen the new symbol what is your opinion of it?
Do you feel that the new symbol depicts accessibility? Please elaborate.

6 Do you have any further comments on this issue?

The results of the survey will be relayed to British Standards Institution BSI and ISO as well as our own GAI membership.

The following article provides background on the existing symbol as well as detailing a need for a new symbol. riglobal.org/about/intlsymbol-of-access/

An online quiz based on this feature is available on the GAI learning Hub. Completion of this quiz is worth one CPD point. https://learninghub.gai. org.uk/totara/dashboard/index.php

GAI

GAI TALK

Simon Forrester, GAI chief executive

The creation of a new panel charged with identifying core criteria for



construction products competence (see p31) is an important reminder that, nearly six years on from the Grenfell tragedy, building safety remains construction's number one priority.

The work of this new panel is a key landmark in the journey towards an important new British Standard. In the post-Grenfell/ Building Safety Act world, the issues of professional competence and the proper demonstration of professional competence WILL directly impact the ability of every individual and every company in the sector to operate and succeed.

Given this context, we are proud of the leading role that the GAI has taken in forging progress in this area. The work that we have done over many years in creating and developing the RegAI standard has been widely recognised as an exemplar. So it feels particularly timely that in 2024 we look forward to welcoming three new categories of GAI Registered Professional.

Students collecting one of three new GAI qualifications at this year's GAI Education Awards are now able to work towards new standards so that, as well as Registered Architectural Ironmonger (RegAI), Guild members will be able to demonstrate specialist professional competence by becoming Registered in Door Systems (RegDS), Registered in Electric Hardware and Access Control (RegAC), and a Certificated Standards & Regulations Advisor (CertSRA).

If there was ever any doubt about the importance of these postnominal letters there can be no more. With everything we have learned over the last six years, and everything we know that is to come, these letters are a reminder that competence is no longer an option, it is a requirement and a responsibility.

GAI Community...

Community Awards celebrate GAI member excellence

The GAI has presented its Community Awards in a ceremony at London's The Brewery.

The GAI Community Awards celebrate the very best businesses and individuals in the architectural ironmongery industry, with categories for achiever, company innovation, customer focus, leadership, and fellowship.

Announcing the winners, GAI Community executive chair Sam Thatcher said: "I want to congratulate everyone who was nominated for one of these awards. The standard was incredibly high and each category was extremely competitive.

"But, of course, there must be winners, and all of today's winners were able to demonstrate that extra special something, that understanding of the need to really go the extra mile, which separates the exceptional from the very good." • Bryony Matthews of IronOut secured the

Achiever award, acclaiming the brightest

and best among those still developing their careers. Daniel Llewellyn of SDS London was Highly Commended.

- The Customer Focus award for individuals, companies or teams that have delivered excellence in customer service was presented to Norseal Ltd.
- The Company Innovation award went to Eurobond Doors Ltd.
- Michael Spoors, managing director of Norseal Ltd, was presented with the Leadership award.
- The Fellowship award, for an individual who has shown a longstanding and ongoing commitment to the GAI, was presented to Karen Nelson, business development manager at HOPPE UK.

Read more about the GAI Community Award winners and shortlisted entries at www.gai. org.uk/CommunityAwards

BELOW: Community Awards winners Neil Smeatom from Norseal; Michael Spoors; Karen Nelson; Bryony Matthews; and Monika Maliugine from Eurobond.





Architectural ironmongery's rising stars celebrated at 43rd GAI Education Awards

The GAI has presented diplomas and awards to industry professionals in a glittering ceremony at London's The Brewery venue.

The 43rd GAI Education Awards on Thursday 23 November celebrated the outstanding educational achievements of students in the 2022-23 education year. Alongside presentations of the established GAI Diploma in Scheduling (DipGAI), this year saw the first successful candidates in three new qualifications: Diploma in Door Systems (DipDS); Diploma in Electric Hardware & Access Control (DipAC); and Certificate in Standards & Regulations (CertSRA).

The event also saw the announcement of prizes for the top students worldwide, and the presentation of the GAI Community Awards, celebrating the very best businesses and individuals in the architectural ironmongery industry.

Joining more than 340 guests from across the architectural ironmongery industry was guest speaker Karen Darke MBE, the paralympic cyclist, paratriathlete, adventurer and author. The event, hosted by GAI chief executive Simon Forrester, was sponsored by Briton and George Boyd Ltd.

As diplomas were announced for 94 successful candidates, GAI president Kaz Spiewakowski said: "Education is a central pillar of the Guild's work – vital to our success and the success of our members. GAI qualifications are recognised and respected globally, and alongside our wellestablished DipGAI scheduling diploma we now have three new diploma-level qualifications to celebrate.

"As such, it is my pleasure today to welcome and congratulate not only those who have achieved our scheduling diploma, but also the first tranche of candidates to have achieved these new qualifications.

"I am especially pleased to see that, regardless of the qualification, the standard of our students remains high, with a very strong pass rate across all "GAI qualifications are recognised globally and we now have three new diplomalevel qualifications to celebrate" **KAZ SPIEWAKOWSKI**

LEFT: Awards winners at the GAI Education Awards BELOW: Kaz Spiewakowski with Karen Darke MBE



these qualifications and at every level leading up to that."

The first prize for top performing students in the Certificate in Architectural Hardware went to Andrew Hullock of Zoo Hardware. Mohamed Aref of Ahram Security Group won the Gold Medal for the top performing student in the GAI Diploma.

The Pinnacle Award sponsored by Robust UK, for the highest aggregate results across the Certificate in Architectural Hardware and Diploma programme, was awarded to Mahaveer Chandrakanthan of Allegion India Pvt Ltd. Read more about the awards and the successful candidates at:

www.gai.org.uk/EDUCATIONAWARDS

RIBA Plan of Work at heart of new guide for architects and designers

An innovative new Architect + Designer's Guide to Architectural Ironmongery has been published by the GAI.

The guide has been produced to bring together all the information that architects, designers and other specifiers need to make the scheduling and specification of an architectural ironmongery package run smoothly and achieve the best possible result. Structured around a brand-new overlay to the RIBA Plan of Work, the document provides unique clarification on

"This innovative new guide will help architects, interior designers and contractors more easily achieve fully compliant hardware package" SIMON FORRESTER where the architectural ironmonger can add value at each stage of this industry-standard model for the design and construction process of buildings.

Published by the Royal Institute of British Architects (RIBA), the RIBA Plan of Work organises the process of briefing, designing, constructing and operating building projects into eight stages, to ensure that all aspects of the project are considered and addressed. Numbered 0 to 7, each stage represents a phase in the project lifecycle and explains the outcomes, core tasks and information exchanges required at each stage.

Taking each stage in turn, the GAI's new guide helps architects and designers identify the ways in which GAI Registered Professionals can help them meet requirements for the demonstration of professional competence, the Golden Thread of information, and the functional, performance, and design considerations raised by architectural ironmongery scheduling. Moving beyond the design stages, it then illustrates how the

BELOW: The RIBA Plan of Work comprises eight stages





ABOVE: The Architect + Designer's Guide to Architectural Ironmongery

architectural ironmonger can help ensure great design is turned into effective and compliant supply, installation, handover and long-term outcomes.

Alongside the new RIBA Plan of Works overlay, the comprehensive 32-page guide features practical advice, checklists, potential pitfalls, and extensive illustrations of best practice relating to hardware products including hinges, handles, door closing and locking devices to sophisticated electronics which control locking and access.

The guide is available as a free download on the GAI website at www.gai.org.uk/ SPECIFIERS. As well as making it available directly to architects, designers and other specifiers, the GAI is encouraging architectural ironmongery companies to include the guide in their own customer relationship processes.

GAI chief executive Simon Forrester said: "By highlighting the contribution that a GAI Registered Professional can make at every stage of the RIBA Plan of Work, this innovative new guide will help architects, interior designers and contractors more easily achieve fully compliant hardware packages which, as well as meeting design considerations, ensure the long-term safety, security and accessibility of buildings." www.gai.org.uk/SPECIFIERS

Industry feedback prompts new cylinder installation guide

A new installation guide for lock cylinders has been published by the GAI, the Door & Hardware Federation (DHF), the Glass and Glazing Federation (GGF), and the Master Locksmiths Association (MLA).

The guide was created following reports from association members of incorrect installation and mishandling of cylinders, resulting in their failure. The technical briefing provides guidance on the methodology for the successful installation of euro profile cylinders for locking devices

GAI technical manager, Douglas Masterson, who chaired the Working Group of industry experts, commented: "This was a great collaboration between the four trade associations as well as a number of cylinder manufacturers.

"It provides best practice advice on the dos and do nots of cylinder installation, highlighting some common pitfalls along the way. We look forward to this being used by a wide cross-section of industry with the aim of increasing levels of competency in this area."

The new publication has been written for manufacturers, installers, and architectural ironmongers.

Download at www.gai.org.uk/USERS





CYLINDER INSTALLATION GUIDE

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Construction product competence panel underway



ABOVE: The new BSI panel builds on last year's White Paper into product competence

A panel working towards the development of a new British Standard for construction products competence began its work in November.

BSI panel CPB/1/-/3 has been charged with identifying core criteria for construction product competence.

Its work will build on the publication of last year's white paper Built Environment – Proposed Construction Product Competence Standard by Competence Steering Group (CSG) Working Group 12

GAI technical manager Douglas Masterson,who co-chairs WG12 as well as representing the architectural ironmongery sector on the new panel, said: "Last year's white paper clearly highlighted the necessity for a measurement of competence of those who use or are otherwise working with construction products – both that they are competent to do so, and that they can demonstrate that competence to others.

"The commencement of this new panel is a key landmark in the journey towards what will be an important new British Standard in this area."

"Last year's white paper clearly highlighted the necessity for a measurement of competence of those who use or are otherwise working with construction products" **DOUGLAS MASTERSON**

Product Security and Telecommunications Infrastructure Act briefing

A new technical briefing has been published exploring the implications of The Product Security and Telecommunications Infrastructure Act 2022.

The Act received Royal Assent on 6 December 2022 and has been enacted into UK law, with companies having until 29 April 2024 to ensure compliance. This law applies to all consumer Internet of Things (IoT) products which includes connected safetyrelevant products, such as smart locks.

The briefing, published by the GAI and Secured by Design (SBD), covers the legislation, its implications, and penalties for non-compliance. It also explains how SBD's Secure Connected Device accreditation can help with compliance. Finally, it highlights relevant standards in the area for people to be aware of, such as ETSI EN 303 645 and ETSI TS 103 701. Michelle Kradolfer, Secured by Design National SBD manager, said: "With less than six months to go, there's still a lack of awareness on the Act, which is why this technical briefing is essential for any company within the ironmongery and security industries that manufacture, import or distribute consumer IoT products in the UK.

"In recent years we've not only seen a significant rise in smart devices being available in the UK market, but number of cyber-attacks on such devices has also increased. Therefore, it is vitally important to ensure that all IoT products have the right level of security in place to protect consumers and reduce the risk of them falling victim to cyber-crime."

This technical briefing is available for GAI members to download at www.gai.org.uk/technicalbriefing



"It is vitally important to ensure that all IoT products have the right level of security in place to protect consumers" MICHELLE KRADOLFER



Updated Foundation in Hardware

The GAI Foundation in Hardware has been relaunched with updated content and a new online learning platform.

The GAI Foundation in Hardware is a flexible online introductory course for those just starting out in the sector, providing an ideal induction course for back-of-house, trade counter, support, or new employees at architectural ironmongery companies.

It also provides a basic understanding of the industry for those who aren't involved in the detail of architectural ironmongery in their day-to-day job, at companies such as locksmiths or builders' merchants.

The course contents, fully revised and updated for 2023, cover the basics of architectural hardware, fire and escape doors, and access control. Comprising 12 online modules, the course can be progressed at the learner's own pace with up to six months for completion. The Foundation course has also been integrated into the GAI's new Learning Hub, providing a single platform that can support learners from the Foundation and on to the Certificate in Architectural Hardware (CiAH) and GAI diploma courses as required.

GAI Training & Development Manager Rachel Tipton said: "The new Foundation in Hardware course provides a fully up to date introduction to the world of architectural hardware, including the latest products, technologies and relevant standards.

"The GAI Learning Hub provides the perfect environment for online learning, and helps make the Foundation course the perfect platform on which to build your career or future development."

Visit www.gai.org.uk/FOUNDATION

Enrolment deadline extended until 31 st January, but don't delay! Enrol today to begin (or continue) your GAI learning journey.

SERIOUS ABOUT ARCHITECTURAL IRONMONGERY? PROVE IT

Globally recognised as the mark of expertise in architectural hardware, GAI qualifications are the best way to prove your knowledge and professional competence to customers and employers alike.

Study with the GAI to learn and progress through the following qualifications:

- Foundation in Hardware
- Certificate in Architectural Hardware
- GAI Diploma in Scheduling
- GAI Diploma in Door Systems
- GAI Diploma in Electric Hardware & Access Control
- Certificate in Standards & Regulations
- GAI Registered Professional (RegAI, RegDS, RegAC)
- Certificated Standards and Regulations Advisor (CertSRA)

From our introductory Foundation in Hardware and skillbuilding Certificate in Architectural Hardware courses, students have a choice of three specialist diplomas – each leading, through participation in our CPD programme, to the benchmark for professional competence as a GAI Registered Professional (RegAI, RegDS, RegAC).

Specialist expertise in industry standards and regulations can also be developed via a dedicated certificate course that paves the way to the Certificated Standards and Regulations Advisor (CertSRA) status.

Find out more

Enrol today to begin your 2023/24 course. Download your copy of the GAI Education Prospectus 2023-24 today at www.gai.org.uk/learning

Guild of Architectural Ironmongers

GAI

Heavy duty

Which door can claim to be the world's heaviest?



This photo from 1979 shows a Lawrence Livermore National Laboratory employee opening what was thought to be the world's heaviest hinged door. It was 44 tonnes with a thickness of 2.5 meters and width of 3.6 meters. A special bearing in the hinge allowed a single person to open or close the concrete-filled door.

The door was used to shield the Rotating Target Neutron Source-II (RTNS-II) — the

world's most intense source of continuous fusion neutrons. Like most of the other contenders for world's heaviest door, it is not designed to keep people out it is more about protecting the outside world from the contents behind it.

Competing for the title is the heaviest swing door in existence. Dubai Studio City has a four piece sliding door that is 90 feet wide x 50 feet tall and weighs 800,000 pounds. Also 'It is not designed to keep people out, it is about protecting the outside world from the contents behind it'

in the mix is to be found at Lockheed-Martin in California: a single piece sliding door that weighs 366,000 pounds. And there's a 740 tonne sliding missile silo top door in Arizona which holds the Titan 2 ICBM missiles.

However, according to the Guinness World of Records, the world's heaviest door is in fact the radiation shield door in the National Institute for Fusion Science in Japan. It weighs 720 tonnes, is 11.73 m high, 11.4 m wide and 2m thick.

LEFT: The world's heaviest hinged door usurped by the radiation shield door at the National Institute of Fusion Science in Japan (BELOW)



THE ALL-NEW

Architect + Designer's Guide to Architectural Ironmongery

Everything you need to ensure the efficient, effective and compliant scheduling and specification of your architectural ironmongery package.

> Designer's Guide The Architec

to Architectural Ironmonger

A free 32-page guide from the Guild of Architectural Ironmongers (GAI), structured around a brand-new overlay to the RIBA Plan of Work for a unique insight into the value that the architectural ironmonger adds at each stage of the design and construction process.

Explore how working with a GAI Registered Professional will help you meet requirements for the demonstration of professional competence and the Golden Thread of information, as well as the functional, performance and design considerations raised by architectural ironmongery scheduling.

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