

Architectural Ironmongery Journal

SUMMER 2024



INSIDE

- Registered professionals
- PC Henderson
- Digital twins





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CONTENTS SUMMER 2024

NEWS AND VIEWS

04 Digest

06 Access in the Asia Pacific market

28 Community: GAI news, including Community Awards winners

FEATURES

- 08 Competency: Meet the new GAI Registered Professionals
- 12 Cover story: Raffles London at OWO
- 20 Profile: the return of PC Henderson
- 22 Knowledge: your need-to-know on digital twins

TECHNICAL

26 Dear GAI... how does the Guild support specifiers?

BACK DOOR

34 The world's smallest working door

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ART EDITOR: Heather Rugeley Updates Projects Standards Events

Digest

ABOVE: Zeppelin Knob in black BELOW: The Minimalist Rose in antique brass







Croft launches discreet new rose

Croft has launched a new rose. With a luxury, clean aesthetic, the Minimalist Rose is compatible with Croft's Elements and Classic door levers and turns, as well as its Classic knobs.

At only 26mm in diameter – 16mm for turns – the Minimalist Rose sits unobtrusively on the door, which, says Croft, allows "the fine detail and silhouette of the hardware to take centre stage".

The Minimalist Rose joins the Minimalist Escutcheon. Both are available in over 25 signature finishes and patinas.

croft.co.uk/products/minimalist-rose

Interior design awards entry closes soon

There's still time to enter the SBID international design awards. Extended entry closes on 28 June. The interior design awards recognise design excellence across a broad range of categories spanning interior design, fit-out and product. They are judged by industry experts for technical content and aesthetic creativity before being put to a public vote. There are 19 categories for interior design, eight for product design and fit out has three. Past winners include the FinBolt Triple Doorset and the Digbeth range by Armac Martin.

Category finalists are announced at the end of July when it goes to a public vote. Regional winners are announced at the end of September and Global winners revealed on 1 November. Enter at sbidawards.com/ enter-awards/

ASSA ABLOY helps Korean tech giant reach carbon-saving goals

ASSA ABLOY recently delivered a high security, highly sustainable solution to a Korean tech company.

NAVER is a South Korean internet conglomerate that runs Korea's leading search engine, as well as providing many of Korea's most used apps and platforms.

NAVER Internet Data Centre (IDC) GAK Sejong is a flagship facility the size of 41 football fields. The facility will act as a cutting-edge future automated data centre that integrates the company's technologies including robots, AI, and cloud services.

"An IDC is a high energy-consuming facility and internet companies have a social responsibility to build energy-efficient buildings," said Byengtaek Han, chief operating officer at ASSA ABLOY distributor CATIS.

"NAVER wanted to reduce energy consumption, make a minimal impact on the surrounding natural environment, and eventually build more sustainable buildings which support its long-term agenda called

BELOW: The NAVER Internet Data Centre

2040 Carbon Negative. Thus, energy saving and eco-friendly solutions were critical success factors to participating in this IDC project."

ASSA ABLOY delivered a total solution to address these sustainability requirements, including the highest security level hardware options that have longer lifecycles and reduce disposal and waste. Automatic door thresholds were installed for all doors to reduce energy consumption and electromechanical locks and swing door operators were selected considering security and energy saving needs. ASSA ABLOY also supplied Korea's first Environmental Product Declaration (EPD) certified door closer.

Correction: In the Spring issue of AIJ the cover story on retrofit refers to the RIBA RetroFirst, campaign. This was incorrect – RetroFirst is a campaign by the Architects' Journal. We apologise for any confusion this may have caused.





RIBA announces regional winners

RIBA has announced the winning projects for this year's RIBA Regional Awards. Each will now go on to be considered for the RIBA National Awards, announced on 11 July, which will in turn, be used to compile the shortlist for the RIBA Stirling Prize, held later this year.

Each region has a building of the year winner. This year's winners are:

- West Midlands Shrewsbury Flaxmill Maltings (above)
- East Gainsborough's House Museum
- Yorkshire RIBA named a series of
- winning projects but no building of the year.
- London Elizabeth Line
- Northern Ireland Ulster University Belfast Campus
- South New Temple Complex
- South East Cobham Bowers
- South West Durley Chine Environmental Hub

• East Midlands – Alfreton Park Community Special School

 North East – Auckland Castle, Tower and Faith Museum

North West – Shakespeare North

• RIAS – The winners compete for the RIAS Andrew Doolan Best Building in Scotland Award. The shortlist is announced in July ahead of the winner in November.

RSAW - Hay Castle

See all the winners at https://tinyurl.com/ mrxhaammriba-regional-awards

GAI

Smart thinking

As Codelocks celebrates the 10th anniversary of its business in Asia Pacific, **Colin Campbell**, shares insights into the market



"There is a growing market for systems for retail and hospitality units, and lockers for transient workforces. There is also an entrepreneurial element keen to tap into the latest developments" **COLIN CAMPBELL**

Globally, access control markets are set

to be worth up to \$20bn in 2030. The APAC market is expected to more than double to around \$840m in that time. Advances in technology are behind much of this market growth, driven by demand for new applications. While mechanical locks dominate the UK and parts of Europe markets, the focus in APAC is very much on digital, smart lock systems. Codes and cards are a feature of everyday life. In fact, key cutting machines are simply not sold in many Asian countries – a clear sign of the direction of travel for the industry.

Working on the next generation of innovation and upgrades involves accommodating different market conditions, regulations and culture. In APAC, this means working closely with cabinet makers and joiners, as well as architects and developers to ensure they get locks that match their needs. There is a growing market for systems for retail and hospitality units, and lockers for transient workforces like the Australian mining sector. There is also a fast-growing, entrepreneurial element that is keen to tap into the latest developments in keyless access control.

Every week, new business opportunities present themselves that call for an access control solution. They could be for a heated locker for takeaway food, or a unit where a biker could store their helmet and leathers. There appears to be no limit to people's imaginations, but what might be holding back the realisation of their ideas is the need to enable access in an unobtrusive, reliable way. This is where integrated access control solutions play a major part in unlocking opportunities for emerging business ideas.

For some, it provides the key to the success of their whole opportunity. Especially when there is a big infrastructure behind it, and an easy-to-use API that the customers can integrate into their booking platform. The infrastructure of the access control provider creates the codes and sends them to the end-customer – the biker storing their kit, or the person collecting their hot meal. Having the access control provider manage the entire system and keep user data secure, means the business owner doesn't have to worry about the access control element of their solution. They can focus on delivering and improving their service. This is what is making the access control market a dynamic and exciting industry to be part of around the world.

Colin Campbell is managing director of Codelocks.

BELOW: providers send codes to customers





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The GAI introduced new diploma and

certificate courses in 2023. With them arrived new categories of GAI Registered Professional: Registered in Door Systems (RegDS); Registered in Electric Hardware and Access Control (RegAC); and Certificated Standards and Regulations Advisor (CertSRA). Roy Buckingham DipGAl DipAC RegAl RegAC RegSRA Regional Specification Development Manager – London & South East Abloy (pictured above right) "I undertook the new Certificate in Standards qualification along with the Diploma in Electric Hardware and Access Control. last year. The driver for me was reinforcing my competence. My role for ABLOY is very much focused on compliance and standards, so I am now working towards the 20 CPD points and annual CertSRA reexamination that are required to maintain these professional registrations.



"Competence is not just about proving the competence you have but understanding where it ends" **ROY BUCKINGHAM**

"There is not a day that passes where I am not either providing training on the standards and compliance for hardware and locking on fire or escape doors or providing solution specifications for projects. I also regularly provide guidance to architects, consultants or end user clients on how they can achieve compliant and secure solutions.

"Competence is something that is very much in the focus at the moment and its not just about proving the competence you have but also understanding where this competence ends. An architectural ironmonger may have expertise in specifying mechanical hardware for doors but does their knowledge extend to electrified hardware and access control? Or a security system installer may be an expert in credential technologies, system networking and installing cabling and containment in buildings but what understanding do they have regarding the application of the electric lock to a fire door or escape door? There needs to be greater collaboration on projects in the built environment to ensure that the right expertise is provided by the right stakeholder for the required aspect of the design or build.

"These qualifications will go some way to proving my competence and will give reassurance to those that I engage with as to my knowledge expertise and qualifications to advise on the topic."

Natalie Ebler DipGAI DipDS DipFD RegAI RegDS estimator Turentek

"I have decided to pursue the new registered professional status to ensure that I am fully up to date with the latest industry standards. It gives me confidence that I am specifying and supplying a fully compliant product.

"I have 29 years in the industry but as new products evolve I feel it's critical that you move with the times and continue to learn, regardless of length of time spent in



"I feel it's critical that you move with the times and continue to learn" NATALIE EBLER



"We have been longsupporting of the GAI and place particular importance on their education programme" ADAM SWEATMAN

the industry. Technology has had a major impact on the ironmongery industry and I feel I have the knowledge and experience to benefit the industry.

"The multiple designations shows this is the highest possible standard of education and professionalism you can achieve. I hope this encourages more women to join and grow in the construction and ironmongery industry. The industry needs and benefits from a wide range of different skill sets."

Adam Sweatman DipGAI DipDS RegAI RegDS sales director, John Planck

Sweatman, along with colleagues David Barden and Hollie Rowe have also attained the new post nominals.

"At John Planck Ltd., we have been longsupporting of the GAI and place particular importance on its education programme. We have continually encouraged and supported our staff through their learning journey and have numerous examples of success stories that have helped develop not only the company or themselves but also the industry. We firmly believe that continuously updating our knowledge is key to remaining at the top of our game and providing our customers with the best service and support.

"We are in an ever-evolving industry and so it is vital that we stay ahead of the curve and stand out from the crowd. Our staff are keen to further their own development and conscientious in wanting to study the additional diplomas, not just for their own benefit, but also that of the company. This enables us to demonstrate our qualifications meaning our customers can be assured of our knowledge and have confidence and trust in what we are advising and specifying."

Jim White, DipGAI DipDS RegAI RegDS DipFD, technical director at Forza Doors

"I consider the door manufacturing, testing and hardware sectors to be intrinsically linked. It is paramount to ongoing improvements in safety and best practice that we understand each element and the effect or contribution they have on each other when combined and utilised in the built environment, particularly in regard to fire safety considerations but also importantly, in operational and structural considerations.

"My motivation to pursue both registered statuses was in part due to the fact that I believe we can all learn something in whatever we do. Just because door manufacturing is my main business, there is always something further to learn. I became far more aware of the steel fire door sector and the testing of steel doors for example.

"Achieving RegAl status made all the difference to our business in terms of credibility and also in terms of developing a wider professional network of people. Having made these connections and having gained an understanding of hardware solutions and certification, I interact with both sectors (door manufacturing and hardware) on a daily basis. When the opportunity arose to be involved in the Diploma in Door Systems program, we felt it was a natural and necessary inclusion to our staff training considerations. Having both professional statuses demonstrates a fully rounded approach to our company awareness. In my career, the GAI education program helped me to stand out massively as somebody who could be trusted to offer expert and considered advice.

"The door and hardware certification landscape is rapidly changing. The supply chain relies more than ever on all stakeholders to provide safe and knowledgeable solutions which can be fully supported by suitable evidence. The GAI education programme enables us to meet our obligations to the sector and be confident in the discussions we have with the sector at large and the solutions we provide to our customers."



"Achieving RegAl status made all the difference to our business in terms of credibility" JIM WHITE



ABOVE: HOPPE team collecting their Diplomas

"I'm so proud to be a GAI Registered Professional and to hold the double-crest" **KAREN NELSON**

HOPPE

Business development managers Karen Nelson, Andrew Syms and Garrath Willshaw, were already RegAl, but after being awarded their Diploma in Door Systems in November last year, they have gone on to complete the relevant GAI CPD programme in less than six months, allowing them to also hold Registered in Door Systems (RegDS) status.

ARRONE technical managers Rob Adams and Rob Mottram also achieved the diploma in November and now hold RegDS status.

Karen Nelson, said: "I'm so proud to be a GAI Registered Professional and to hold the double-crest. It's important to be able to prove competency in the industry not only to our customers, but the wider construction industry that we are interacting with on a daily basis."

Learn about GAI courses and qualifications at.gai.org.uk/learning Find GAI Registered Professionals at gai.org.uk/registered

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Suite splendour

The Raffles London OWO project swept the 2024 RIBA/GAI Specification Awards including taking the Winner of Winners prize, sponsored by GEZE. **AIJ** reports

The biennial RIBA/GAI Specification Awards

identify and reward excellence in the specification and design of architectural ironmongery. As GAI Treasurer Philip Goldberg said at the opening of the event: "The AI Specification Awards celebrate architectural ironmongery at its most effective and beautiful best. Entries are judged on the totality of the architectural ironmongery specification - how it supports and enhances the design vision; how it ensures the security, safety and accessibility of the building; and the contribution it makes to the functionality, sustainability and longevity. As such, these awards highlight the importance of genuine partnership between architects, designers and architectural ironmongers, and rightly reward the whole specification team."

Turn to p18 to view the list of winners and look out for coverage of these winners in more detail in future issues of AIJ.

Architectural ironmongers HAF @ John Planck Ltd and EPR Architects received a total of three awards for their work together on the Grade II listed Old War Office in



"Its huge amount of beautifully crafted bespoke ironmongery fits seamlessly into the overall aesthetic of the building" Whitehall – an Edwardian building steeped in history including its role as a command base for Winston Churchill during World War 2.

The team scooped the Hospitality Award for the Raffles London at OWO project, the Residential Award for The Old War Office Residences and claimed the top prize of Winner of Winners, sponsored by GEZE. The project impressed the judges with its "huge amount of beautifully crafted bespoke ironmongery which fits seamlessly into the overall aesthetic of the building". They commented on the attention to detail in the specification calling it "exceptional".

Originally built in 1906, the London landmark was sensitively restored over an eight -year period (2015-2023) and transformed into a five star hotel and luxury residences. Raffles has taken residence at The OWO with its first UK hotel in a collaboration with New York-based designer, Thierry Despont. This architectural gem is now fully open to the public, with the hotel, 85 unique private residences, nine restaurants, three bars, Guerlain's first London Spa. ▶ BELOW: A hallway in the hotel showing the richness of period detail

5,300 1,000 19 Doors Windows Packages





ABOVE: Handle and lock detail BELOW RIGHT: The hotel bar

"We liaised with a staggering 37 different consultants ensuring suitability and compliance of ironmongery design"

HAF@John Planck Ltd was approached by EPR Architects, the lead architect, to assist with scheduling the ironmongery for the entire project – both residential' and the Hotel – with over 5,300 doors and 1,000 windows, spread across 19 separate packages.

"Co-ordination was vital to the success of this project," say the ironmongers. "We liaised with a staggering 37 different consultants including four separately appointed interior designers for the numerous areas across the entire project, ensuring suitability and compliance of the ironmongery design intent throughout.

"This co-ordination included our own supply chain, predominantly UK based, but also further extended to the various door manufacturers appointed to the project who we worked closely with to ensure the ironmongery proposed was suitable and compatible for the vast amount of differing door types and designs."

The restoration of such an iconic landmark required a fully co-ordinated range of ironmongery suitably performance and fire tested to meet the requirements of the existing and new doors throughout the development.

With a total number of different product types supplied in the hundreds, the number of differing bespoke products designed and manufactured was well into double figures ranging from lever handles, pull handles and other door trim items to window and espagnolette handles and other general accessories.

Primarily because of the Covid-19 outbreak, there was a client request for a protective coating to be applied to the common area fittings including the outside of the hotel bedroom doors, that are handled in order to protect the guests from ongoing and future infectious diseases.

"We applied a Nanotech coating which is a titanium oxide that exhibits strong oxidative properties capable of decomposing harmful organic compounds, killing bacteria as well as eliminating odours when exposed to light," says the ironmongers.

In addition to the ironmongery, HAF® John Planck also supplied, installed and commissioned over 50 automatic door operators throughout with push button and key switch activation based on the client's requirements. Instead of finger protection devices running vertically for the majority of the door heights, it specified 'flat scan' 3D laser safety sensors. The high-resolution volumetric laser curtain detects fingers and bodies in the entire detection area, allowing perfect safety of the hinge zone with coverage of the leading edge to safeguard this part of the door too.

The protective 'Nanotech' coating was used on the push to exit buttons and key switches for the auto door operators.







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ABOVE: The entrance to the hotel ABOVE RIGHT: Ironmongery on the entrance to the spa at the hotel

Brass was used as the base material with a mixture of burnished bronze and antique brass finishes





Given the number and variety of architects door designs, sizes, construction and ironmongery requirements, every door type was outside of the door manufacturer's standard test scope, so each type was independently fire tested (over 50 in total) at a cost of circa £500,000. HAF supplied over £100,000 of sacrificial ironmongery to be burnt as part of each test with over £1,200,000 worth of door leaves tested and burnt during the course of the project.

As with the hotel, brass was used as the base material of the trim furniture with a mixture of burnished bronze and antique brass finishes chosen to develop a natural patina over the course of time where possible.

The lever furniture was bespoke manufactured based on an Art Deco design concept with stepped detailing to the tapered neck and face of the lever handle grip with a matching step to the rosette. Ancillary items such as escutcheons & bathroom turn/releases were also produced, consistent with the stepped detail. For the entrance doors, bespoke centre door knobs and bell pushes were produced and for the sliding pocket door systems that were used in 'latch' and 'bathroom' scenarios, we manufactured bespoke 'plain' and 'bathroom' flush pulls, all machined with the stepped detail design to compliment the trim furniture.

This design followed on to the custom floor door stops which had the stepped detail machined into the top surface area.

Even the bespoke casement lever handles that were produced to operate the espagnolettes, some with a euro-profile cylinder cut-out at the correct 'centres', had the stepped design detail to the backplate to coordinate with the door ironmongery.

All of this and the relevant corresponding sash lifts, fasteners, stops and screws were all finished in the burnished bronze finish to stay in keeping with the aesthetic theme.

However, a further challenge was with regards to other products produced from alternative materials that were required to be >







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ABOVE: Detailed ironmongery on the bar door

"Monumental is the only adjective to describe an undertaking that transforms 580,000 sq ft of former offices into 750,000 sq ft of luxury"

specially refinished to be as close a match as possible to the burnished bronze finish. Items such as the mortice electric locks, automatic door operator covers and arms, anza bolts, 'push to exit' buttons and key switches were all successfully re-finished, with the buttons and key switches being done prior to the application of the Nanotech protective coating.

"Monumental is the only adjective to describe an undertaking that transforms 580,000 sq ft of former government offices into 750,000 sq ft of luxury residences and some of the most expensive hotel suites in Europe!"

AND THE WINNER IS...

Public & Commercial Award (sponsored by ASSA ABLOY) Featherstone Building, London Architect – Morris+Company Architectural Ironmongery – Allgood Ltd

Hospitality Award
(sponsored by dormakaba)
Raffles Hotel, The Old War Office, London
Architect – EPR Architects
Architectural Ironmongery –
HAF @ John Planck Ltd



ABOVE: Rhodes House, Oxford

Residential Award

(sponsored by Frank Allart) The Old War Office Residences, London Architect – EPR Architects Architectural Ironmongery – HAF @ John Planck Ltd

Health & Education Award (sponsored by FireDNA) Rhodes House, Oxford Architect – Stanton Williams Architectural Ironmonger – 3v Architectural Hardware



ABOVE: A door catch at Raffles London

International Award

(sponsored by Norseal) Atlantis, The Royal Interior Designer – GA Design Architectural Ironmongery – Allgood Ltd

Ethos Award

(sponsored by Codelocks) Cherry Tree House Architectural Ironmongery – EM-B Solutions

Product Design & Innovation

(Mechanical) Award (sponsored by CES) 485 & 585 Concealed Escape Hardware – ASSA Abloy

Product Design & Innovation (Electronic) Awards (sponsored by ADSA) TeDee – Access2



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Sliding back into view

After a spell out of the limelight, leading manufacture of sliding and folding door hardware PC Henderson is returning to a focus on the specifier market. **Nicky Roger** finds out what's in store

PC Henderson is back! In fairness the

sliding door hardware specialist hasn't been away, but it's back on the radar having rejoined as a GAI member and has a refreshed focus on the specifier market. David Newton, sales and commercial director, explains. "We are well known within the architectural ironmongery sector, but we did move away from the market a bit, stopping some of the support we used to offer. But we have made the decision to raise our profile once more. We are relaunching to architectural ironmongers."

This refreshed profile started with joining the GAI last year and launching a new range of products over the past 18 months aimed at the specification sector and architectural ironmongers. "This is key," says Newton. "There has been a lot of investment in new products and we are about to launch a new brochure which is full of technical content, which is great for Als."

The improved products over the past 18-24 months include:

• Husky 120 Pro – a new straight sliding solution which has low initial friction – the product comes with a range of accessories

such as dual soft close, simultaneous action, new low headroom kit, etc

• New Upgrade Pocket Door and Pocket Door Pro ranges – with Pocket Door Pro taking 11 minutes to install.

• New upgrade Securefold Pro external bifolding door hardware.

 Shutterslide – an automated or manual system for shutters in residential or commercial applications.

• Automated Evolve Pocket Door Pro – ideal for disabled access applications. The firm is in the process of completing a project in Scotland with approximately 200 systems for this product.

Newton says the products have been well received and had two aims: to develop products with the architectural ironmongers and specification channel in mind and to develop products that are easy to install – "fitter friendly".

As part of a five-year generation plan for the business, this product development will continue. "We will continue to work to offer products that are easy to install for the residential, commercial, and industrial sectors," says Newton. "We have already introduced automated systems to our range, we have also sees demand for automated system increase and we will continue to develop our product in this area too."

Newton stresses the company's great technical service. "We have very experienced staff here who can specify products from scratch. So if somebody contacts us with a query we can specify that and get a full technical quotation back to them."

Newton says this knowledge staff hold is a huge benefit to clients. "We have people in the office who've been here nearly 30 years and they know all the products inside out. That knowledge is something that you you can't buy."

PC Henderson's trust pilot score is 4.6 and its NPS score is among the highest in the ASSA ABLOY group which it became part of in June 2010.

UK made, globally sold

The company sells itself on its quality, expertise and heritage. It is over 100 years old, has its own in-house design and R&D teams and manufactures in the UK which is part of its appeal globally. It sells to over



"There has been a lot of investment in new products and we have a new brochure full of technical content" **DAVID NEWTON**

70 different countries around the world and has offices in China and Middle East where the demand for British made goods is high. "The Made in Britain tag is massive in Dubai and in China and Hong Kong," says Newton. "In China we have been selling our product for 40 years, aiming for the top end of the market, marketing our quality product and high value. We're not competing with budget brands."

The firm is ISO 9001, and ISO 14001 accredited and products come with 10 years warranty. "We have people contact us about products that have been installed for decades that are still working fine."

The ISO 14001 links to environmental credentials, another important strand for the business especially since joining ASSA ABLOY. "ASSA ABLOY has goals with regards to the environment and carbon footprint and we work towards that as well. It's a prerequisite for being part of the group and we are happy to do that."

With new products already on the market and more to come with a specifier focus, it's a warm welcome back to PC Henderson.



GAI

Do I need to know about digital twins?

Digital twins are rapidly taking the built environment by storm. Do specifiers need to be in on the action? **Nicky Roger** finds out

In simple terms a digital twin is a virtual

copy of something real. In the built environment it's a digital replica of a physical building complete with sensors to monitor changes in fabric and performance. The digital twin is a computer model that looks and behaves like the actual thing. Data is sent to the twin - information about how it is performing, its environment, its condition – and the digital twin uses this data to simulate and analyse the building's behaviour. For example, it can predict when a part might fail, suggest improvements, or test changes before applying them to the real object. The technology helps companies gain more data about a building's performance in real-time.

At last year's Women in BIM conference an expert panel debated the definition more fully. Vicki Reynolds, chief technology officer of Catalyst, stressed the data sharing as key. "You can have the most detailed model in the world of your physical asset – that is not a digital twin, unless it has two-way connectivity of data. So if your physical is speaking to your virtual and your virtual is speaking to your physical, you have a twin. Anything less than that is a simulation or a cloud or BIM, it's something else."

BSI Standard

In a bid to ensure everyone is singing from the same hymn sheet when it comes to digital twins, BSI created a new standard



"You can have the most detailed model in the world of your asset that is not a digital twin" **VICKI REYNOLDS** which sets out the concept of a digital twin. Dan Rossiter, a chartered architectural technologist at the BSI working on digital transformation in the built environment explains why we need BS ISO/IEC 30173 and what it brings to the industry.

"As with every new innovation, it is impossible to agree on good practice if we can't agree on what it is; high-level concepts and terminology are needed so we can **>**







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constructionmanagement.co.uk/cpd-modules

"Products with sensors may be a requirement for [the] future as well as buildings where a client wishes to use a digital twin" DAN ROSSITER

communicate with each other. This is why many new standard series start with either a vocabulary standard, or a standard outlining concepts and principles. Similar to ISO 19650-1, the concepts and principles for building information modelling (BIM), ISO/IEC 30173 sets out the concept of a 'digital twin'. ISO/ IEC 30173 is interesting for two reasons: 1) It has a cross-sectoral view of digital twins. Meaning it isn't just about construction, but considers manufacturing, healthcare, transport, aerospace, agriculture, and other areas which may use a digital twin. 2) It provides an authoritative source for a definition. For me, personally, having an authoritative definition is incredibly useful. It allows anyone to look at something and test whether it is a digital twin or not. If accepted by the market, will greatly reduce the misunderstanding and the mislabelling of products as digital twins.

Specifiers be aware

Rossiter is keen to stress that for the architecture and specifier sectors there's not likely to be an urgent need to gen up on digital twin, but that if you're specifying any product that has a performance element it's likely to become more important.

"This may sound controversial, but I don't feel architectural professional and specifiers need to be overly concerned with digital twins. Looking at the work of the National Digital Twin Programme, for example, the focus is on exchanging operational/business information,



ABOVE : Foster + Partners ARD group pioneers cutting edge technologies

ARCHITECTS AT CUTTING EDGE

Leading practice Foster + Partners through its Applied Research + Development (ARD) group has been pioneering cutting-edge technologies for the past few years. It is exploring AI, machine learning and digital twin, among other developments. It has created a digital twin of its campus on the South Bank in London which has delivered two years of detailed geometric and business data from air quality sensors deployed throughout the campus and detailed information on energy monitoring.

But as Adam Davis from ARD explains, the experiment goes beyond just improving the performance of its own buildings; it enables them to pass

the knowledge into design. "We want to understand how our buildings perform during the whole of their lifecycle. We're obviously interested in the spatial and material record of the building, and also, therefore, asdesigned, as-built, operational models of buildings and building assets. We're also very interested in the data that can be acquired through spaces in use - relating to things such as indoor and outdoor air quality, occupancy, and energy usage. All these things together can give you a useful ongoing picture of how your building is functioning. And you can then take that knowledge and bring it back into design."

not information on a building itself. As such, if a local authority was to have a digital twin of a school, what they would be 'twinning' (i.e. what it capturing using sensors) wouldn't be windows, doors, and other construction elements. They would be capturing the internal environment of rooms (e.g. temperature, CO2).

"What it may mean, however, is that designers/specifiers should consider which products need a control element. Products with sensors and actuators may be a requirement for future smart builders, as well as for buildings where a client wishes to use a digital twin. Using our school example, if the room becomes too warm or the CO2 levels get too high, the digital twin could signal an actuator to open the window.

"Understanding the need of the owner and operators will be key to ensuring fitfor-purpose solution is provided. Through the advent of digital twins, this may mean requirements beyond typical performance requirements."

Take an online quiz based on this feature on the GAI Learning Hub and earn one CPD point.

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
- Registered Architectural Ironmonger (RegAl)
- Registered in Door Systems (RegDS)
- Registered in Electric Hardware & Access Control (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 industry benchmark for professional competence, GAI Registered Professional status (RegAI, RegDS and RegAC).

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

Find out more

Enrolment opens 1 July for course commencement in September 2024. Download your copy of the GAI Education Prospectus 2024-25 at www.gai.org.uk/learning

Guild of Architectural Ironmongers

Dear GAI...

How can the GAI help those of us who specify architectural ironmongery? **Douglas Masterson** answers the question

There is a host of information from GAI

produced specifically to support the architectural ironmongers, architects, architectural technicians, designers, engineers, contractors and others in the construction industry who are involved in the specification of architectural ironmongery.

Ensuring that those who specify are kept up to date and can maintain their competency in this key skill is core to the work of the GAI, as is helping our members work more effectively with specifiers. The importance of the relationship between specifiers and architectural ironmongers can be seen in the recent AI Specification Awards (see p12), where all the winning projects demonstrated a high level of partnership. The following is a list of just some of the information available to support specifiers and those working with them.

"Ensuring those who specify are kept up to date and can maintain competency is core to the work of the GAI"

GAI Knowledge base

The GAI Knowledge Base contains over 100 resources. Examples of these include the GAI Specifier's Resource Book, scheduling resources, Technical Briefings. GAI Specifiers' Guides, Guides to Standards, and Quarterly Technical Reviews.

Specifier's Resource Book 2024

Newly published for 2024, this provides a source of information and reference for specifiers. It includes articles, best practice advice, and a directory of GAI members. It also showcases award-winning architectural ironmongery projects and products from the GAI/RIBA AI Specification Awards 2024.

Architect • Designers guide to architectural ironmongery

An innovative new Architect + Designer's Guide to Architectural Ironmongery brings 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 where the architectural ironmonger can add value at each stage of this industry-standard model for the design and construction of buildings. This publication received a commendation at the 2024 Trade Association Forum awards.

Specifiers guides

These technical publications review the issues, legislation, standards and best practice involved in key areas of architectural ironmongery specification. These include topics such as:

- Ironmongery, fire doors and intumescent protection
- Ironmongery and the impact of the Internet of Things
- Ironmongery and the Environment
- Specifiers guide to Access Control
- Ironmongery for fire and escape doors
- Ironmongery and accessibility
- Ironmongery and security
- Ironmongery and specialist applications
- Installation of fire doors and associated ironmongery
- Ironmongery specification in a post-pandemic world

RIBA approved CPD presentations

The GAI has 11 CPD presentations which have been approved by RIBA and are all available to GAI member companies to deliver to their architects and specifiers



upon receiving training from GAI to do so. Further information on these can be found from technical@gai.org.uk.

Scheduling resources

The GAI has produced templates to aid members in the production of ironmongery schedules. These include a master key schedule template and a preamble template. The preamble template has been devised by GAI in Word format for members to copy and paste in to the preamble section of their own ironmongery schedules. This will be in addition to referencing any relevant standards and abbreviations featured in the schedule. This template is intended as a guide only; members can add their own sections.

GAI End User Guides

These publications are provided to help specifiers as well as end-users in key sectors get more from their architectural ironmongery. As well as covering maintenance recommendations and care of finishes for relevant materials, they include useful checklists to help the user with critical products such as fire doors, escape doors and automatic doors.

GAI Sustainability briefings - coming soon

In Autumn 2024 we will introduce our first set of GAI Sustainability Briefings to provide support to membership in this key field. The briefings will be broken down to three areas: the environment, social factors, and economic impacts.

Maintaining competence

The GAI provides ongoing support to specifiers through the Registered Professional CPD scheme such as RegAI. Since the publication of the Building Safety Act in UK, it is now incumbent on all to maintain and demonstrate levels of competency to perform a role. Specification as a key function of architectural ironmongery is no different. Ensuring skills and knowledge are kept up to date is more relevant than ever before. The CPD provided by GAI is highly effective in keeping all up to date.

Ongoing UK government collaboration

GAI has been working closely with UK Government to ensure the voice of our membership is clearly heard where it matters most- at the heart of UK Government. The recent proposed changes to Approved Document B in respect of BS 476 22 is an example of where GAI have been consulted either directly, or through our membership of the Construction Leadership Council Regulatory Affairs Committee. Changes to this would have a profound impact to architectural ironmongery specifiers in particular.

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



GAI TALK

Kaz Spiewakowski GAI president

Members are the lifeblood of an organisation like the



GAI. Everything we do is with them, by them and for them. The Guild can lead, support, encourage and represent, but it is the energy and commitment of our members that makes this work possible. This energy and sense of a shared purpose is perhaps most apparent at our events.

In this edition you can read about the AI Specification Awards 2024, an event which celebrated not just the winning projects and products but also the exceptional contribution that our sector makes towards the quality of the built environment. That theme of excellence was underlined yet again at the recent GAI Community Awards, presented to outstanding individuals and companies during our Member Day, making a welcome return to our annual calendar.

The GAI has been able to demonstrate our members' sense of unity and shared purpose in our recent responses to the UK Government on its proposals for fire door testing standards. After what seemed like an encouraging initial announcement it was disappointing to see this issue re-emerge, apparently unresolved. Rest assured we will continue to press the case that this proposal will only serve to cause harm to our world-class sector and the wider construction industry, without delivering any meaningful benefits.

This Guild belongs to its members, so it is vital that we know what those members want of it. You will read in these pages news of some surveys – first of individual members and then, from September, corporate members. If you are a GAI member, please do take the time to complete one. By letting us know what you think, you can help us make sure members remain front and centre of everything we do.

GAI Community...



ABOVE: Samantha Thatcher hands over the chair to Simon Ayers

GAI Member Day

The GAI's popular Member Day made a return this year with a packed day of networking, engagement, education and celebration for individual and corporate members.

Taking place at Staverton Park Hotel and Golf Club near Daventry on 8 June, the day began with a welcome and opening address from GAI President Kaz Spiewakowski.

The outgoing Community Executive Chair Samantha Thatcher formally handed over the role to Simon Ayers, who then gave an update on progress and plans from the Community Executive Committee.

A panel discussion then followed, with a detailed exploration of the emerging issues around competency in architectural ironmongery and the wider construction industry. GAI technical manager Douglas Masterson was joined by Chris Stevens of Gretsch-Unitas, Gary Hewitt of Door Controls Direct, and Paul Duggan of Warringtonfire to represent the perspectives of the architectural ironmonger, manufacturer, and test house.

CPD sessions were delivered through the afternoon by ASSA ABLOY, Mann McGowan, dormakaba, Carlisle Brass, HOPPE and GAI.

Delegates also visited the Ironmongers' Village to explore the latest product developments from companies including Access2, Cooke Brothers, Frank Allart, Hoppe, Mann McGowan, ASSA, AMADEO, Norseal, and Element.

An evening drinks reception, dinner & awards ceremony, sponsored by Carlisle Brass and George Boyd, then saw the presentation of the GAI Community Awards 2024 (see opposite). Other sponsors on the day included Inenco, Robust UK, and SDS London.

Celebrating excellence at the GAI Community Awards 2024

The Guild of Architectural Ironmongers (GAI) has announced the winners of its Community Awards 2024.

The presentations were made at a dinner and awards ceremony during the GAI Member Day at Staverton Park Hotel and Golf Club near Daventry on 8 June.

Presenting the awards, GAI Community Executive Chair Simon Ayers said: "It is a privilege and an honour to announce the winners of our Community Awards, honouring individuals and businesses that have exampled leadership, innovation, and service to the industry, and those who have gone above and beyond to deliver exceptional results for their clients." The Achiever Award, acclaiming the brightest and best among those still developing their careers, was presented to Abbie Molesworth of Door Controls Direct.

Two presentations were made in the Customer Focus category, with Carlisle Brass winning the company award and Haq Meharban of Instinct Hardware the individual award.

The Leadership Award went to Simon Ayers of SDS London, and the Company Innovation Award to UAP Ltd. The Fellowship Award for longstanding and ongoing commitment to the GAI was presented to Sam Thatcher of SDS London.

BELOW (L-R): Simon Sutton (chair of the Community Awards Judging Panel), Barry Halpin from UAP, Rachel Tweddle from Carlisle Brass, Sam Thatcher, Abbie Molesworth and Simon Ayers.



"These awards honour individuals and businesses that have exampled leadership, innovation and service to the industry" SIMON AYERS



GAI member survey

The GAI has launched a survey to gather the views of individual members. As well as looking for feedback on GAI member services and activities, the survey provides an opportunity to make suggestions to shape the future of the Guild.

The survey was launched at the GAI Member Day in June and will be online for members to complete until the end of July. A similar survey of GAI company members will be launched in the autumn. www.gai.org.uk/survey

Meet a member: **John Gill**, UK sales and marketing director at AMADEO Systems Ltd

What made you choose a career in architectural ironmongery?

I came into architectural ironmongery kind of by accident. Like many people I was completely unaware of the technicality that goes into door ironmongery until I was in the industry and I found it absolutely fascinating. I did my degree in mechanical engineering so AI appealed to me straight away. I have worked in electronic access control for a number of years and if it wasn't this industry it would have certainly been something in the construction products sector.

Summarise your company in three sentences?

Our strapline 'Beyond Access' summarises our company perfectly. We aim to go beyond the standard offers available to our customers, we want to push the boundaries of what is achievable in access control and above all we want to bring a fresh new perspective to the market.

What do you love about the industry?

That one is easy, it's the people… even our competitors! Seriously though, I can honestly say that this is one of the friendliest

"This is one of the friendliest industries I've worked in; it is very professional but people also know how to have a good time" JOHN GILL industries I've worked in; it is very professional but people also know how to have a good time and that is great too.

What specification/schedule/product are you most proud of and why?

That has to be Freeflex our high security cylinder. It is revolutionary in terms of design and its unique key has 79 octillion differs! This number is so large it is difficult to comprehend but to try to put it into context it is way more than a trillion keys for everyone on the planet! It is going to revolutionise master keying systems as for the first time the key plan can be established AFTER the cylinders are installed.

What do you find most challenging in your role?

I expect it's the same as most people – time. We have so much work to do to build our company and brand and there's never enough hours in the day but the team at AMADEO are great and we're loving it.

What do you do in your spare time?

I love to get outdoors and enjoy walking and as I spend so much time sitting it's great to get to the gym to blow off some steam (it's great thinking time too!). I did think about counting the number of Freeflex keys but that would take a little too long!



GAI seeks UK clarification on fire door testing



The GAI continues to seek clarification from the UK Government following recent announcements on the future of fire door testing to BS 476 22.

Consultations on amendments to Approval Document B, in England (with a similar consultant in Ireland) launched in early 2023.. This included proposals to move away from testing to the British standard BS 476 22 in favour of testing solely to the European standard EN 1634-1. But since then, the UK Department for Levelling-Up, Housing & Communities (DLUHC) has continued to consult on the proposed change.

GAI technical manager Douglas Masterson said: "While the initial announcement was a welcome one for the architectural ironmongery industry, the wider construction sector, and the safety of the built environment, there does appear to be further consultation ahead.

"We are encouraged that governments have listened and responded to our concerns so far, and I trust they will continue to do so.

"These proposals would lead to the re-testing of a huge number of products

currently on the market, costing millions of pounds, putting businesses and jobs at risk, and reducing the availability and choice of tested and compliant products – all without delivering any meaningful improvement to safety.

"During our campaign we have delivered multiple technical briefings and ran consultations which have identified and amplified these issues, and allowed us to deliver the views of the sector directly to all those in government involved in these proposals. The GAI is grateful to everyone who contributed to this industry-wide "We are encouraged that governments have listened and responded to our concerns so far, and I trust they will continue to do so" **DOUGLAS MASTERSON**

effort and we will continue to lead and coordinate this effort through whatever further consultation there might be."

GAI publishes new resources for specifiers and designers

The GAI has published a new Specifier's Resource Book to support architects, designers, consultants and construction professionals working with architectural ironmongery and hardware.

As a demonstration of best practice architectural ironmongery projects and products, the book features the winners of the RIBA/GAI AI Specification Awards 2024. It also includes articles, advice, and updates on competence, standards, and legislation, as well as the importance and value of working with a GAI Registered Professional to achieve world-class project delivery, compliance, and outcomes. Information is also provided to help specifiers find fully qualified architectural ironmongery professionals, including a full directory of GAI Registered Professionals and member companies.

GAI Technical Manager Douglas Masterson said: "The biennial GAI Specifier's Resource Book is not just a celebration of design excellence and best practice in our sector, but also a guide to some of the key issues and challenges facing our design and specification partners – and the ways in which architectural ironmongers can help resolve those."

The guide is being distributed to industry professionals including architects, architectural technologists, architectural ironmongers, chartered builders, and interior designers, and is available as a free download on the GAI website. It is the latest in a series of GAI publications produced to support specifiers, including free technical guides to the legislation, standards, and best practice involved in key areas of AI specification, from fire safety, fire and escape doors to accessibility, security and access control.

www.gai.org.uk/specifier

Enrol early for GAI qualification success

The GAI has confirmed that enrolment for its 2024/25 courses will open from 1 July, following last year's successful trial of summer enrolment.

The Guild brought forward the enrolment date for its internationally recognised programme of certificates and diplomas to give candidates time to complete their applications and associated paperwork over

Evidence shows that a prompt start to studies gives candidates a clear advantage and the best opportunity to achieve the summer, ahead of the release of course material and the start of the courses in September.

Evidence shows that a prompt start to studies gives candidates a clear advantage and the best opportunity to achieve their potential in GAI courses and qualifications.

The 1 July enrolment date applies to the Certificate in Architectural Hardware (Stage 1 and 2); Diploma in Scheduling (DipGAI); Diploma in Door Systems (DipDS); Diploma in Electric Hardware & Access Control (DipAC); and Certificate in Standards and Regulation (CertSRA).

Enrolment for the introductory Foundation in Hardware course remains open year-round as before, with a new Foundation in Doors also due to launch this September alongside new modular introductory courses.





New resources for GAI members

The GAI has published new resources to help members get more from their membership. Two new presentations have been released to help members communicate the value of their GAI membership and/or GAI Registered Professional status. The presentations, available in Powerpoint and PDF format, have been added to an updated Membership Resources page on the GAI website.

Also available is a new booklet called Making the Most of Your Membership, designed to give company member administrators the information they need to access GAI benefits and services and roll those out to company employees.

GAI membership engagement manager Laurence Whittle said: "The Guild provides a wide range of services and benefits for its members, such as its technical Knowledge Base, business support, world-class learning and the latest industry data.

"These new resources are designed to help make sure the right people in each company have access to the right services, and that members can then communicate the many ways in which their GAI membership benefits customers and other stakeholders."

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 Archited

to Architectural Ironmongen

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.

Essential information for all architects, designers and specifiers, and for architectural ironmongers to use in their own customer relationships.

Get your copy today at www.gai.org.uk/SPECIFIER

Guild of Architectural Ironmongers

Over the tiny threshold

The world's smallest functional door is the entrance to the world's smallest hotel

A house built to sidestep marriage

laws is now a boutique hotel trading on its status as the world's smallest hotel. And, naturally, the entrance also boasts being the world's smallest functional door.

Eh'heusl is an 18th century gem in Amberg, Bavaria in Germany. Nestled between two larger buildings, the little red hotel measures just eight feet wide and 570 square feet (or 53 square metres) total. The door is 47.3cm wide.

The Eh'heusl was built in 1728 and renovated in 2008 to become a luxury boutique hotel. The nearly 300-year-old building was designed to circumvent an ancient marriage law that stipulated that couples wanting to tie the knot must own property.

A local businessman built on a narrow gap between two neighbouring buildings with no side walls and just a roof, creating a house that could be used as proof of property for couples. Couples would buy the tiny house, get married, and sell it to the next duo, earning it the nickname "marriage house."

Designed for a maximum of two guests, the mini inn now includes a foyer, sitting room, fireside lounge, bathroom, bedroom, and even a whirlpool. It's now a popular spot for honeymooners and couples celebrating anniversaries. ABOVE AND RIGHT: En'heusl in Bavaria claiming the world's smallest working door

CC BY-SA 3.0

DRZOWEI,

The building was designed to circumvent an ancient marriage law that couples must own property

SERIOUS ABOUT ARCHITECTURAL IRONMONGERY? PROVE IT

The Guild of Architectural Ironmongery (GAI) supports, assures and represents architectural ironmongers, wholesalers, manufacturers and others working in and alongside the sector.

Membership of the GAI demonstrates your company's commitment to highest standards of technical excellence, professional competence and regulatory compliance.

Join the GAI today for:

- 50% off fees for the GAI's renowned education programme – the only one in the world leading to qualifications in architectural ironmongery to British and European standards.
- Specialist technical resources, advice and support.
- Regular networking opportunities to help you expand your professional network, make new contacts, and help shape the industry.
- Free business support services to save your company £££ on HR, legal, health & safety, and recruitment.
- Attractive discounts, free publications including AU magazine, and much more!

To find out more about GAI membership, email membership@gai.org.uk or visit www.gai.org.uk/membership.

Guild of Architectural Ironmongers

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CL5000 NetCode®



Codelocks proudly presents the CL5000 NetCode[®] electronic lock range.

With the original CL5000 having stood strong since its launch, the CL5000 NetCode[®] is an evolution of a time-tested classic. The addition of Codelocks NetCode[®] Technology unlocks added benefits of temporary, time-sensitive access codes that provide an increased level of access control.



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