



SPRING 2024



#### INSIDE

- GAI/RIBA awards shortlist
- London office project
- Access security pitfalls





### The BL7006 ECP comes with our heaviest duty latch yet...

High traffic design

6

- Con the door code change
  - 1000 hours salt spray tested (MG models)
- SFIC key by-pass (BL7700 models)
- Cycle tested 500k+
- Heavy duty 60mm backset latch
- Optional free passage mode





Tel: Email: Web:

+44 (0)1708 225700 Sales@borglocks.com www.borglocks.com















aij is published by the Guild of Architectural Ironmongers. Ironmongers' Hall, Shaftesbury Place, London EC2Y 8AA Telephone +44 (0)20 3370 8540 Website: gai.org.uk

Although this magazine is the official publication of the Guild of Architectural Ironmongers, claims and opinions expressed by contributors and advertisers do not necessarily reflect the official views of the GAI. Copyright the Guild of Architectural Ironmongers 2007 ISSN 0959-986x

#### CONTENTS SPRING 2024

#### NEWS AND VIEWS

- 04 Digest
- 06 What I specified for....
- 08 The GAI/RIBA Specification Awards shortlist
- 10 Workshop: access control security pitfalls to watch out for
- 28 Community: GAI news, including the AIJ Magazine of the Year award

#### FEATURES

- 14 Cover story: Retroftting
- 20 Inspiration: London office
- 22 Knowledge: why CPD is now about proving competency

#### TECHNICAL

26 Dear GAI... how can we meet the demand to specify sustainable options?

#### BACK DOOR

34 The world's most expensive doors

EDITORIAL PANEL:

Kaz Spiewakowski President Email: president@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 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



### Updates Projects Standards Events

Digest

## Foster + Partners designs handles



Foster + Partners Industrial Design team has collaborated with German door handle brand FSB to launch a door handle collection that conveys the architecture firm's attention to detail.

The industrial design team at Foster + Partners – one of the world's leading architecture firms, known for buildings such as London's Gherkin – created the FSB 1291 and FSB 1292 door and window handles for FSB. They are regarded as a premium solution for civic and commercial spaces.

The cornerstone of the product family is FSB 1291 – a handle that combines a distinctive shortness with a flattened top edge, giving it a pronounced contact surface.

FSB 1291 with its pebble-like softness is designed to be pleasurable for both the hand and eye and was moulded to fit the palm. FSB describes the product's subtly refined design as "elevating the overall experience of moving through a building".

"When we take hold of a lever handle, this is often our first contact with a building," said

head of Foster + Partners Industrial Design, Mike Holland. "A coherently designed handle provides a warm welcome – through looks and haptic qualities geared towards utility and inspired by people's needs."

The initial design of the FSB 1291 shaped the rest of the product family, which includes FSB 1292 – a handle with a longer grip.

Further enhancing the tactility of the handles is the option of FSB's new finish: Aluminium Pure. The brand describes it as "a visual and tactile advance and at the same time particularly sustainable", as the usual final steps in aluminium processing are eliminated, leaving a raw appearance that makes the product easily recyclable. According to FSB, making aluminium in this way also uses less energy and water.

The FSB 1291 and 1292 handles are also offered in standard aluminium, stainless steel and bronze. They come in a variety of versions for different requirements and an EN 179-compliant model.

http://tinyurl.com/yzp88fj8

## Nearly half of architects now use artificial intelligence

Close to half of UK architects are now utilising artificial intelligence to carry out their projects, a report by the Royal Institute of British Architects has revealed. The survey, which is the Royal Institute of British Architects' (RIBA) first examination of the industry's use of artificial intelligence (AI), revealed that 41 per cent of UK architects are already employing the technology "on at least the occasional project".

Additionally, 43 per cent of those architects using AI believe it has improved the efficiency of their design process. Among the ways these architects are currently using the technology is for the automation of admin-based tasks and to reduce the carbon footprint of projects in tandem with digital twins.

"We use AI to provide code for the automation of various aspects of project

**RIGHT:** An idea generated with Midjourney a popular AI tool

and document management, but still

to a very limited degree,"

said one of the anonymous respondents.

"We use virtual environments and digital twins to achieve a radical reduction in the carbon, energy, water, and waste footprints of costly physical construction," added another.

RIBA president Muyiwa Oki said the findings show "there's no turning back" from AI. "AI is the most disruptive tool of our time. Our findings show architects are curious and open-minded about AI, and some of us are true pioneers," Oki said



Œ

with key duplication patent protection to 2038.

#### New high security locking cylinder boasts patent to 2038.

Locking system manufacturer CES has launched a newly patented cylinder system. The PXM6 range of cylinders has received key duplication protection by patent which runs to 2038 and is available in all cylinder type variants and sizes.

UK national sales manager Dan Rising commented that the new system "is being snapped up by security tenacious customers who don't allow the regulatory standards to dictate the safety of their buildings". Rising added that the strength of the CES key "can accommodate even the most heavyhanded user".

Features and functions available with the PXM6:

The TS007 standard with 3 star BSI Kitemark protecting against picking, drilling, bumping and snapping

 PXM profile cylinders are also available in a modular system allowing the cylinders to be adapted to the thickness of the door

- Fire tested to EN standards
- Seawater-resistant design
- Wear-resistant design
- Classroom function
- Anti-barricade function
- 1, 2, 3 keying
- Construction keying

CES's locks are available in over 50 different colours and special finishes. cessecurity.co.uk

#### Cost and carbon materials database launched

The Building Cost Information Service (BCIS) has launched its Cost and Carbon Materials Database that can calculate cost and carbon values for more than 9,200 common building materials. Developed from BCIS' work on the cross-industry Built Environment Carbon Database (BECD) launched last year, the new database is compliant with the RICS wholelife carbon assessment standard.

It includes UK average merchant prices and outlines the effects of inflation, past and forecast, on the cost of those materials.

Materials have been assigned a representative environmental product declaration (EPD) where one is available. Where there is an inconsistency because different units of measure have been used in the EPD, BCIS provides the calculation and converted carbon value to use.

The database will enable users to consider whether they need to pay more for building materials with lower embodied carbon values, BCIS said. It will also give professionals the ability to compare multiple product options side by side, alongside a 12-month inflation forecast on those costs.

The database will also enable the tracking of changes in cost and carbon values as a project progresses.

BCIS chief executive James Fiske said: "When it comes to actually being able to make informed decisions, so you can properly assess the monetary and environmental costs of using one material or product over another, you can be tripped at the first hurdle because the units of measure for what you're comparing aren't even the same.

"The Cost and Carbon Materials Database is our first step to making those decisions much easier."

bcis.co.uk





## What I specified for... Department, Leeds

Catherine Higgins RegAl, Em-B

Department is a

#### shared co-working

space for Leeds's media, creative and digital businesses. It aims to create modern working environments with hospitality, social spaces, and wellness amenities. Department is part of Leeds Dock, a creative neighbourhood already home to Sky Digital and Channel 4.

Em-B Solutions was asked to design and supply a flexible, web-based access control system for the new co-working space. By their very nature, co-working spaces like Department are open to many, and this poses challenges for security and access control, with many people coming and going at different times demanding quick and easy-to-use access, coupled with security for themselves and their possessions. Traditional corporate offices deal with a constant workforce who generally come and go at similar times. Busy, high-traffic co-working spaces have a continual tide of people arriving and leaving, often with different levels of access, including visitors. This makes the issue of security and controlling access more complex than for traditional commercial spaces.

#### Meeting the challenge

Em-B's access control team created an integrated access control and security system, including automatics on the main door and speed gates, which control the flow of subscribers, staff, and visitors. Based on the Salto KS system, we supplied an access control system that delivers an advanced security framework on a fully remote and wireless cloud-based smart access management platform that users can operate from their smart phones. The Department management team has control of all functions and features from the web or mobile app to track events and users, unlock doors remotely, or block anyone that leaves on the go, managing all doors, users, and locations in real time. It also delivers





**ABOVE AND BELOW:** Acccess was the key challenge for shared space Department

"We supplied an access control system on a fully remote cloudbased platform that users can operate from their smart phones"

advanced security features on a fully remote and wireless cloud-based smart access management platform.

#### **Future proofed**

The access control system at the Department is designed with the potential to be expanded to encompass other aspects of co-working life, such as time and attendance software, asset management, lockers, and secure mailboxes/parcel delivery solutions. This anticipates and caters to the evolving needs of a dynamic co-working environment.



## Manufactured, Tested, Specified, Certified

Sunray is the specifiers choice for Timber Fire Doors and passive Fire Protection. Our comprehensive Timber Door Range provides Fire Integrity from FD30 to FD120 and Security Rating of SR1 & SR2 with Fire Secure.

All Doors are bespoke enabling specialist hardware, vision panels, overpanels and of course colours and finishes.

We operate in numerous sectors and provide performance specifications to meet project requirement.











COMMERCIAL







For more details, call our specialised team to discuss your particular project on

01233 639039

sales@sunraytimberdoordivision.co.uk www.sunraytimberdoors.co.uk















ABOVE: Rhodes House on the shortlist for Health & Education category BELOW: Red Bull, shorlisted for Ethos Award



**ABOVE:** Bee'ah headquarters, a finalist for the International Award

## And the winner is...

#### The GAI/RIBA AI Specification Awards shortlist has been announced



#### The GAI in conjunction with the Royal

Institute of British Architects (RIBA), has revealed the category shortlists for this year's AI Specification Awards. These awards identify and celebrate excellence in the specification of architectural ironmongery in the construction industry. Over 30 projects and products have been shortlisted across eight categories:

- Public & Commercial
- Hospitality
- Health & Education

- International
- Product Design & Innovation Mechanical
- Product Design & Innovation Electronic
- Ethos Award

All category winners will automatically be put forward for the judges to consider for the Winner of Winners category prize. The results will be announced at an awards ceremony at Southwark Cathedral, London on 18 April 2024, with tickets now on sale. **To book tickets visit www.gai.org.uk/** specificationawards







ABOVE: Crawley Civic Offices, shortlisted in the Public & Commercial category

**ABOVE RIGHT:** YY in London, a contender for the Ethos category

LEFT: The Sky Residences, shortlisted in the residential category RIGHT: The Old War Offices shortlisted in the Residential category

**BELOW:** Raffles Hotel, London finalist for the Hospitality prize







# access control security pitfalls to avoid

Access control technology advances apace. But it pays to be aware of the security gaps, cyber risks, limited scalability and restricted capabilities of many access control systems

1.

### Most RFID access cards and fobs are not secure

The vast majority of contactless cards and fobs in use today can be cloned in seconds. To be secure, physical access systems need to use up-to-date contactless card technology standards, such as iCLASS SE and DESFire EV1, which can prevent unwanted access to the identity information they store. In general, secure card technologies support:

Mutual authentication between card and

reader to prevent card information from being shared with any reader.

• Strong encryption of data communication with the card to prevent 'eavesdropping'.

• Protected access to memory areas to secure information stored on the card.

• Avoid proprietary card technologies that rely on security by obscurity rather than rigorously tested standards. Such technologies can lock organisations in to limited supplier choice and may prohibit integration with other identity based controls in the organisation.

### Biometrics and smart phone credential limitations

Controlling busy entrance and exit points demands fast and reliable verification of each person's identity as they pass through. Mobile phone based credentials that are readable over long ranges introduce uncertainty over whose credentials within the vicinity are actually being checked, while for biometrics the time taken for accurate validation generally makes them unsuitable for rapid throughput applications.

Photo ID-cards that include a secure RFID technology for physical access provide a more widely applicable solution that is cost effective, convenient for staff, and strengthens overall security.

Biometrics are best applied as an additional layer of security for specific **>** 



## Whatever you want, whatever you like.

We can provide fully bespoke items and are used to dealing with lots of materials, from our more traditional stainless steel to wood, brass, leather and Ultrafabrics.

We've also invested in a brand-new powder coating plant and cutting machinery. Whatever you want (or like) we're able to do it all in our factory, meaning we can keep our lead times low and our quality high. Whatever you want...

### TRUST YOUR INSTINCT.



An ISO9001:2015 & ISO14001:2015 registered company

Call us on 0121 459 2358 instincthardware.co.uk

GAI

critical areas. The speed of biometric verification can be improved using an ID-card that securely stores the holder's biometric signature information; this can then be compared quickly with a biometric scan taken by a suitable reader at the door, before proceeding with secure validation of door access permissions.

#### 3.

### Needless exposure to third party vulnerability

Organisations should ensure they have control over the information required to encode the secure RFID cards that work with their access control system. Suppliers and installers often fail to make customers aware that this is even an option.

Card encoding tools are available that allow organisations to encode secure access cards with their own unique keys, so avoiding any reliance on suppliers or installers to protect that critical information. Alternatively, secure standard cards can be pre-encoded with a configuration known only to a client and a card manufacturer.

#### 4.

### Multi-site access management complexities

Door access control systems tend to be site-centric, therefore managing permissions across multiple sites requires the addition of dedicated synchronisation appliances to share data between each location on a time-scheduled basis, which adds both cost and complexity.

It is possible to leverage existing standard access control infrastructure used in IT networks to manage physical access as well; delivering scalability simplifying access management across all sites.

#### 5.

#### Delays to updates taking effect at doors

'Offline' systems only periodically update doors with changes to who is allowed access.



'Online' systems make access permission changes effective in real-time, providing instant control over physical access rights.

Standard IP data network communications allows access requests from across the whole network to be processed within a fraction of a second. Different network architectures, including cloud based designs, can also be accommodated without any degradation in speed or reliability.

Making use of standard and existing network cabling makes installing online systems straightforward, while wirelessly controlled door locks remove the need to run any cables at all to the doors.

#### 6.

#### Cyber-security risk

Modern access control systems connect to an enterprise's network and need to be given the same consideration as any other IT-connected system from a cyber security perspective.

The IT infrastructure hosting a physical access control system needs to be properly supported, with regular maintenance to apply security updates against new threats along with provision for data back-up and power supply resilience.

IP network connected devices, such as door controllers, should be well

supported by manufacturers with timely security updates that can be applied easily to installed hardware.

#### 7.

#### Data privacy compliance

Most physical access systems store personal information that falls within the scope of General Data Protection Regulation (GDPR), (names, email addresses, photographs etc.) and so need to be compliant.

Compliance to GDPR requires that any UK or EU citizen's personal data that is stored in their employer's physical access control system must be protected in accordance with the regulations, including access to that data being auditable and appropriately managed, consent being obtained to store a person's data and the right of the person to have their data removed when it is no longer required.

#### 8.

#### Building safety compliance

Emergency escape routes from buildings need to be defined in accordance with local building code and safety regulations .

With the growth of the access control market and more electronic hardware products being used on fire doors and escape doors, the standard EN 13637:2015 was introduced. This now means that electrically controlled locking products such as electromagnetic locks, electric releases, electrical panic hardware and electric locks can be used on escape doors as part of a compliant system. EN 13637 is not intended to replace the existing standards, but rather to provide additional options to control unauthorised use of escape routes and escape doors. Further detail can be found in GAI DHF Publication "Access Control on escape doors" on www.gai.org.uk/knowledge.

This article first appeared at edgeconnector.com

## FRELAN THE NAME OF QUALITY HARDWARE ARCHITECTURAL HARDWARE

### INTRODUCING

#### SIX NEW RANGES OF LEVER ON ROSE

VENICE MIDTOWN BLOOM CLASSIC JET GEO



For more details including available finishes, please visit our website



www.frelanhardware.co.uk

# Going retro

Retrofitting is gaining traction as the solution to the carbon crisis in the built environment. **AIJ** reports on the questions and opportunities this raises for architects and architectural ironmongery sectors

#### "The greenest building is the one that

already exists". When Carl Elefante, former president of the American Institute of Architects, said this in 2007 he was making the case for reusing and upgrading existing buildings, rather than demolishing and replacing them.

There is increasing clamour for retrofitting to replace razing in a bid to meet net zero targets, preserve heritage buildings and manage waste caused by construction. The statistics back up this argument. Retrofitting an existing building can typically save between 30% to 50% of the costs compared to constructing a new building. 50,000 buildings are demolished every year in the UK and when looking at the wholelife carbon impact of buildings the Royal Institution of Chartered Surveyors (RICS) has found that, by practical completion stage, 35 per cent of the whole-life carbon of a typical office development will already have been emitted. The figure for a residential block is 51 per cent.

RIBA, the architects professional body, has an established campaign to promote retrofitting - RetroFirst. Launched in 2019 it calls for the reuse of existing buildings, to prioritise retrofit over demolition and rebuild, and has continued to gather much support from leading organisations and businesses in the property and construction industry.

Last summer construction giant Mace added its clout to the demand with a report recommending a 'retrofit first' approach to be adopted into UK planning policy. Nondomestic buildings 'represent 13 per cent of UK building stock', the report found, 'but account for 23 per cent of carbon emissions from buildings, with more than 3.5 million non-residential buildings requiring retrofit in the next 10 years'.

The RIBA RetroFirst campaign calls for central government to take the lead in promoting the reuse and high-quality refurbishment of all existing buildings, an even more urgent task given the new target

"By completion 35 per cent of the whole-life carbon of a typical office development will already have been emitted. The figure for a residential block is 51 per cent" of cutting carbon emissions by 78% by 2035. It makes three demands: for government to cut the VAT rate on refurbishment, repair and maintenance from 20% to 5% or below; to amend policy to promote the reuse of existing buildings to high standards; and thirdly to insist that all public funded projects look to retrofit solutions first.

#### **Quality information needed**

It would appear government is listening. Last summer it overturned a decision allowing Marks & Spencer to demolish and replace its flagship store on London's Oxford Street (although subsequently lost the high court appeal), and in January this year it announced a review looking at the barriers to retrofitting historic buildings. It identified five key challenges. Chief of these was planning issues but it also found that providing better quality and easily accessible information is needed, to help historic building owners understand how to improve buildings without damaging their special qualities or fabric.

Retrofitting applies to all existing building stock but is more challenging with historic buildings because of the need to preserve their historic character which requires expensive specialist skills and materials, which are in short supply.

## 86,500

The average number of new workers per year needed until 2050 to retrofit England's traditionally constructed buildings in order to meet Net Zero targets SOURCE: HISTORIC ENGLAND

Sheffield's listed Park Hill housing estate has won its architect retrofit awards for its 'sensitive touch

OM PARNEL



ABOVE: Allgood faced multiple challenges with Bath Abbey BELOW RIGHT: 210 Pentonville Road

"The approach of mend and repair has led to a sensitive and detailed design that might not have emerged if building from scratch"

According to Geoff Wilkinson, a building inspector and AJ columnist, one of the biggest challenges is that the Building Regulations are only worded to recognise the use of new materials, and these have to be certified.

"When you are using recycled or upcycled materials, it is highly unlikely that they will be tested to the current standards, so you have this immediate barrier," he says. "What needs to happen is that the regulations are reworded and ensure that upcycled and recycled materials can be used.

"We really need to ensure that we keep much better records of products and materials that are going into buildings to ensure that the paper trail is there. BIM Ibuilding information modelling! records can help us to determine that these materials are suitable for reuse.' In addition, Wilkinson proposes that the regs should be updated to include both an Energy Performance Certificate and a new 'materials performance certificate'. This could ensure a whole-life carbon approach so that the embodied carbon in the materials used forms as much of a part of a building's sustainability profile as its potential in-use energy efficiency.

This is where professional specifiers can step in with product knowledge, specifically sustainability and performance data. Using a GAI registered professional to specify architectural ironmongery in a retrofit or historic refurb scenario will result in more than merely specifying aged brass handles.

#### **Competence in retrofit**

Competently specifying for a retrofitting project will demand a broad knowledge of product, performance, legislation and compatibility. This would cover:

- Understanding Building Regulations and Standards
- Compatibility and integration: is the hardware compatible with the existing infrastructure of the building?
- Security and safety: how durable is the hardware and does it meet security measures?

• Can the products improve energy efficiency, such as prevention of heat loss?

• Sustainability: what data is available for the hardware being proposed, including its environmental impact, recyclability, and use of sustainable materials?

• Warranty and maintenance: what are the whole life costs of the products?

• Compliance with historic preservation requirements: does the hardware match the original design or meet specific conservation standards?

#### **Clever solutions**

While the battle to change policy and planning continues, the architect and specifier sector is becoming increasingly inventive in its efforts to work with existing buildings and product. It's leading to some quietly innovative interiors and clever solutions to retrofit problems.

HUT Architecture's light-touch reworking of 210 Pentonville Road, London, for example, involved framing the entrance to be more prominent, moving, cleaning and refitting the interior's floor tiles, and using perforated metal panels to hide older plant equipment rather than ditching it for new machinery. The approach of 'mend and repair' rather than 'demolish and discard' has led to a sensitive and detail-oriented design that might not have emerged if building from scratch.

This philosophy has also been seen with dline's Rehandle initiative, the industry's





#### 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.



A free 32-page guide how the Guid of Architectural frammangers (GAI), thirtiest and council of branch-new overlay to the RIBA Plans of Work for a unique insight into the value front the architectural interestinger adds at each stoge of the design and construction process.

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

designers and specifiers, and for architectural isonmongers to use in their own customer selationships.

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

#### **SIMONSWERK**

**ANSELMI** The concealed hinge system for residential doors

#### ANSELMI

- completely concealed hinge system for residential doors
- for timber and aluminium frames
- for unrebated residential doors
- 3D adjustable
- load capacity up to 60kg
- opening angle 180°
- hinges with reduced frame part 21 mm available

It all hinges on excellence.

www.simonswerk.co.uk

"It has future-proofed this listed building while remaining in tune with the spirit of the original design. This is what retrofit is all about"

first circular economy offer. The Danish door hardware designer takes original products to be fixed, parts replaced and brushed to work as good as new. The firm claims each Re-handle® will save up to 90 per cent CO2 emission and claims to prolong the life of products up to 100 years. dline is challenging the industry to Re-handle® the same product up to four times. "With each Re-handle® the 20-year product warranty period is renewed, securing 100 years of use. With an asking price for a Rehandled product that is 60% lower than a newly produced item, it is straightforward to make the enduring choice and reuse instead of buying new.

"Based on the fact that every new product put into the world has severe CO2 impacts, choosing to Re-handle® products instead of producing new will dramatically reduce its carbon footprint between 54-91%, depending on the product," the firm claims. dline has documented its products' complete Global Warming Potential (CO2emission) across the entire life cycle, based on fully documented, internationally recognised EPDs.

In a seminar held at Architect@work event in March, titled 'Re-use and Regain' a panel of experts debated the retrofit issues and posed a provocative question: given that most of the buildings that will be standing in 50 years time have already been built, how can we adapt structures in creative and exciting ways to inspire the next generation to consider whether we should be building at all?

#### LEADING BY EXAMPLE

#### **Brutally sensitive**

Mikhail Riches won the 2023 AJ Retrofit of the Year award for its sensitive upgrade of a 1960s Brutalist housing estate in Sheffield. The light-touch approach taken included insulating the existing brickwork internally and carefully cleaning it externally. The design built on lessons from Phase 1 and on conversations with tenants, but it was also informed by observations of how the structure has been personalised by its residents. Architect Rob Wilson wrote of the scheme in the AJ: "The thorough research and deft hand that Mikhail Riches has brought to it has impressively future-proofed this listed building while remaining seamlessly in tune with the spirit of the original design. This is what retrofit is all about."



ABOVE: Park Hill in Sheffield

#### **Factory reset**

Architects 5th Studio worked with social entrepreneurs Blogs to create the UK's first open-access factory providing maker businesses with affordable workshop space, access to state-of-theart equipment and the opportunity to build a community of fellow makers.

The new facility is part new build and part adaptive reuse of a former vehicle testing facility. The light-filled



**ABOVE:** Bespoke solutions for Bath Abbey

building, eight-metres tall space went beyond preserving the embodied carbon of the original structure by not demolishing it and the whole facility is heated using waste from the timber machining workshops.

#### Grade 1 challenge

The Bath Abbey Footprint Project sought to renovate the 17th Century Grade I listed building sensitively whilst modernising its facilities to cater for presentday demands.

Allgood provided a complete package of ironmongery and a comprehensive access control solution. The project required many bespoke items to accommodate the Abbey's historic architecture. Challenges included how to bring a 400-year-old lock back into working order as part of a modern access control systems; how to improve access control and security for the ancient catacombs which needed constant airflow to maintain the right environmental conditions; and how to supply hardware for doors and frames which were protected by Historic England listing requirements.



#### Stunning Hex Range, 50+ Products!

With the hexagonal modern shape, this range offers a show of supreme luxury.

## Find me here:

Alexander & Wilks products by



# Working class

Lynch Architects and izé created ironmongery to reflect the design motif in the architecture of a new London office space. **AIJ** reports GAI

#### Designed by Lynch Architects for Landsec,

n2 is a new-build office forming part of the Nova Estate in Victoria, London. Completed in summer 2023, n2 is one of a complex of three workspace buildings that will form the final part of a masterplan on Victoria Street, London SW1, for LandSec.

Located next to the Grade II listed Victoria Palace Theatre and directly above Victoria Underground station's ticket hall and tunnels, the development faced multiple challenges. They overcome with considered design and close collaboration with an expert team comprising of Landsec, Mace, Lynch Architects, Aecom, G&T, and Robert Bird Group. Featuring offices across 16 floors, each with access to outdoor space in addition to a communal terrace and clubroom for all occupiers on Level 15, n2 has been designed with employee wellbeing, productivity, and collaborative working at its core.

The building's design is influenced by the surrounding townscape, underground conditions, and its role in accommodating various constraints and limitations, such as the Victoria Line running tunnels and listed buildings to the south, including the Victoria Palace Theatre. The complex constraints led to a distinctive concrete and steel truss structure supporting the office above. The office façade is designed to reduce solar glare to minimise running costs, offering a unique office space.



"The ironmongery series connects structural and finish elements providing a cohesive and thematic basis for the building's overall design"

#### Ironmongery to match architecture motif

A reoccurring motif within the building is of a rectangle or square with the opposing corners of two sides curved. This occurs on the single concrete column situated in the reception area, and repeats throughout the building; for example in the wayfinding signage, or in the safety manifestation on the glazing, and in the shape of the clubroom serving counter.

It is also the thematic basis of the 'Nova Handle' ironmongery series from izé.. Co-

designed with David Evans, the Nova Handle features a square or rectangle with opposing curved corners, evident in the lever handle (NOVAL01), and bathroom turn (NOVAT01). The ironmongery series connects structural and finish elements, providing a cohesive and thematic basis for the building's overall design.

NOVAL01 is described as "in perpetual motion, the opposite curves at each end of the handles design create a sense of spatial disparity and uniformity in conjunction, encapsulating the fluidity of the handle as it is pulled down". Coupled with a circular rose, this distinctive design is available in all izé finishes for full customisation and a bespoke touch.

NOVAT01, the bathroom turn, is a delicate miniature of the lever handle design. It exudes the same arched and straight edges at opposite ends, producing a flowing and rounded shape upon a circular rose.

A combination of all Nova handle designs, the NOVAPo2 pull handle encompasses the shape of the privacy turn at the top and bottom of the oak insert, proving that Lynch Architects left no stone unturned during the design process to mimic the theme of the estate. Originally made with a satin nickelplated finish, the handles can be finished in all izé finishes from the range.

www.ize.info



## SECRET RECIPE: THE HANDLE PRODUCTION PROCESS

 Conceptualisation
We begin by creating initial sketches, exploring various forms and shapes while considering the overall project vision and goals.
Design and Engineering Next, we refine these concepts to optimise and customise the product to fit specific requirements such as door frames and locks using CAD softwares. Prototyping and Testing In the final step, physical prototypes are constructed and rigorously tested for factors like proportion, tactile feel, and resistance. This iterative process ensures the development of a high-quality product, ready for production.

TOP AND LEFT: Ironmongery design mirrors the architectural motif of a rectangle with opposing corners curved.



## Walking the talk

The Building Safety Act made new demands on competence in the built environment. Professional bodies have revamped CPD programmes, requiring members to go beyond building knowledge by proving their skills

"We must step forward showing leadership, accepting responsibility and demonstrating competence... and to prove our expertise." This was the comment the then RIBA president Alan Jones made in 2020 when RIBA overhauled the architects' education and CPD processes.

Competency is widely understood in terms of SKEB - skills, knowledge, education and behaviours. Prior to the Grenfell tragedy CPD in the built environment sector was typically voluntary and paid no attention to the B - the behaviours. Although many professionals would willingly build CPD through attending seminars, conferences and courses this could too often become a tick box exercise with no requirement in CPD schemes to demonstrate the learning gained from the CPD.

The Competence Steering Group (CSG) set up in the wake of Grenfell Tower tragedy made a number of recommendations in its first Raising the Bar report in August 2019. Chief among those was the principle that "Behaviours need to be based on competence" and that CPD needs to be improved at all levels and properly managed. And the Building Safety Act 2022 states anyone working with Higher-Risk Buildings (HRB) will be required to demonstrate their competence to do so.

Professional bodies in the built environment have responded with





#### CONSTRUCTION MANAGEMENT Brought to you by CIOB

#### Take CM's latest CPDs

- Sustainable roofing
- How to manage ethical employment practices
- Improving design and building efficiencies
- Managing highways surface water
- Avoiding common roof defects
- Managing occupational health risks in archaeology
- Automated, mastless machine control
- Roof glazing more than glass
- How to deliver cleaner power to construction sites
- Mechanical ventilation's role in improving indoor air quality
- Solar PV in pitched roofing applications
- Managing biodiversity on construction sites
- Head protection in construction
- Timber and the circular economy
- Drainage pumps construction, climate change and consultancy

Keep up to date with the latest Construction Management CPDs in our dedicated online channel:

constructionmanagement.co.uk/cpd-modules



"We must step forward showing leadership, accepting responsibility and demonstrating competence ...and to prove our expertise" ALAN JONES

significant changes to their CPD system. RIBA's new CPD involves regular tests of competence in order for architects to retain their RIBA accreditation. And from January 2024, all architects are required to participate in the Architects Registration Board's CPD scheme as a condition of registration. The ARB says: "Competence is not a static achievement but an evolving standard, so the knowledge and skills relevant to your professional work must be kept up date".

The GAI has also set a new professional competency agenda. Last year it introduced a new model for the CPD of GAI Registered Professionals.

The changes were designed to ensure the annual CPD requirements for architectural ironmongery professionals remain in line with those for architects and other professionals in the construction and comparable industries.

The changes increased not only the amount of CPD activity required every year, but also the quality and amount of assessment involved. Three core topics are specified each year, of which at least one is based on an update to standards and regulations. These changes were supported by a wider range of CPD eligible activities than ever. Alongside these changes, the GAI also introduced new qualifications in 2023 to support the widening number of specialisms within the sector. To the Diploma in Scheduling (DipGAI) were added the Diploma in Electric Hardware and Access Control (DipAC); Diploma in Door Systems (DipDS); and Certificate in Standards and Regulations.

Crucially, in the same way that DipGAI opens the pathway to RegAI status (via the CPD programme), these new qualifications also open the pathway to GAI Registered Professional status: Registered in Door Systems (RegDS), Registered in Electric Hardware and Access Control (RegAC); and Certificated Standards and Regulations Advisor (CertSRA).

As a result of these two major changes, to CPD and the qualification programme, professional competency in architectural ironmongery is now signified not just by RegAI but also RegDS, RegAC and CertSRA all four are Registered GAI Professionals.

#### Individual responsibility

The key theme with all these revised CPD initiatives across the industry is not just professional competency but demonstrable competency. The BSI issued BSI Flex 8670, in 2022 - 'a code of practice which sets core building safety criteria for built environment competence frameworks'. It is intended to support wider industry reform. The standard states that while oversight of competence might rest with professional, trade or training bodies, competence is ultimately an individual responsibility relevant to every person in the construction and built environment workforce. www.gai.org.uk/learning www.gai.org.uk/cpd



#### 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

## Dear GAI...

As specifiers we are facing an increasing demand to deliver sustainable solutions. What do I need to be aware of and what more can we as an industry do? **Douglas Masterson** answers the question



#### The evidence of climate change is there

for all to see, and we know we have a responsibility to look at the reduction of environmental impacts on all aspects of our lives. So let's look at the issues impacting the ironmongery industry from a sustainability perspective...

"GAI has now set up a new sustainability working party to look at what the industry can do"

#### **Current industry impacts**

One measure of the industry's current approach is seen in the GAI Specification Awards where we have introduced sustainability as a new criteria for judging. On our shortlisted entries we have seen substantive evidence of the impact this is having on both new products being placed on the market as well as the supply of ironmongery material to construction projects. For example we have seen local sourcing to reduce carbon footprint of supply; products manufactured in factories run from 100% renewable supplied energy; products being made from predominantly recyclable material such as cast aluminium, steel and zinc; use of Environmental Product Declarations (EPDs) and the supply of product with fully recyclable packaging.

#### **New industry initiatives**

Some of our members are looking at taking sustainability a step further through new initiatives such as take back schemes or more sustainable finishes. One example of this is d line Re-handle (one of the products shortlisted in the GAI RIBA Specification Awards.) This is where original products are taken back and refurbished. This initiative is stated to help reduce the carbon footprint between 54-91%, depending on the product. Another GAI member - FSB has developed a new finish for aluminium entitled Aluminium Pure. Thanks to the naturalness of the largely untreated surface, Aluminium Pure when compared to an anodised surface consumes 37% less energy during production.

#### What more can we do as an industry?

One of the biggest impacts specifiers can make is to look at the longevity of products we are specifying. Whilst budget is always a factor in specification it is essential 37%

Aluminium Pure when compared to an anodised surface consumes 37% less energy during production

to look to offer longer term solutions in schedules rather than products which will inevitably need to be replaced over a short period of time. Every new product that is produced and placed into the world has CO2 impacts, some of which may be more severe than others.

We also need to be more aware of what is happening in sustainability and GAI has plans this year to educate our membership further in this area. We are currently preparing a CPD Core presentation entitled "Ironmongery and sustainability" which will be written by industry experts. It will cover topics such as Net Zero, Environmental Product Declarations (EPDs), Life Cycle Assessments and environmental standards such as ISO 14001

GAI has now set up a new sustainability working party to look at what the industry

can do. As part of this we will be creating a new suite of sustainability briefings throughout 2024 on topics such as Environmental Product Directives (EPDs) and relevant industry standards. These will complement our existing "Ironmongery and the Environment" RIBA approved CPD which is available for members to deliver to their practices, as well as the accompanying GAI Specifiers Guide on the same topic.

#### Impact of regulations

We also need to be aware of the impact of upcoming changes in regulation both in UK and in Europe. The process to push embodied carbon further up the UK government agenda has already been set in motion by leading figures in our industry who have called on the government to implement Part Z into Buildings Regulations 2010. If enacted, Part Z would ensure that embodied carbon is assessed on all projects, as part of a comprehensive whole life carbon assessment. Although not yet mandatory, it is gaining industry support and the Department for Levelling Up, Housing and Communities (DLUHC) has agreed to consult on its strategy for embodied carbon regulation and has commissioned further



"The revised European Construction Products Regulation (CPR) is due to be published late 2024, this will make an impact on construction products in terms of sustainability"

industry research on the topic. The results of these are expected later this year.

The revised European Construction Products Regulation (CPR) is due to be published late 2024, this will make an impact on construction products in terms of sustainability. According to the proposed Regulation, the manufacturers will have to deliver environmental information about the life-cycle of their products. Moreover, they will have to comply with several obligations, including:

• Design and manufacture a product and their packaging in such a way that their overall environmental sustainability reaches the state of the art level;

• Give preference to recyclable materials and materials gained from recycling;

• Respect the minimum recycled content obligations and other limit values regarding aspects of environmental sustainability;

• Make available, in product databases, instructions for use and repair of the products;

• Design products in such a way that re-use, remanufacturing and recycling are facilitated.

As with all relevant industry issues and concerns GAI will continue to keep membership aware of any changes which will impact membership.

#### GAI

#### GAI TALK

Kaz Spiewakowski GAI president

I have been delighted to see such strong interest in this year's RIBA/GAI AI Specification



Awards, something that is clearly reflected in the quality of the entries celebrated on this year's shortlist. Good luck to you all ahead of April's award ceremony at Southwark Cathedral.

More than anything the shortlist illustrates to me the ever-growing strength of our industry's engagement with architects, designers, contractors and our other partners across the construction industry. These relationships have never been more important and are absolutely vital if we are to meet the huge challenges we all face in construction, whether in competence, cost, sustainability, skills and more.

I am pleased also to see the return this year of our Member Event to the annual architectural ironmongery calendar. As well as hosting the Guild's 63rd AGM, this event on 8 June will be a great opportunity for GAI members to network, to learn and to celebrate, particularly with the announcement of the GAI Community Award winners. Do make sure you get those award nominations submitted to celebrate the qualities of your people, teams, and business. Booking is also open on our website for the AGM and Member Event - and don't miss the chance of a Sunday morning round of golf on Staverton's championship course, if that is your thing!

Finally, on behalf of the Guild's executive committee I want to take this opportunity to thank Simon Forrester for his contribution to our work over the three years he served as chief executive. Simon left the Guild at the end of 2023, and we wish him all the very best in his future endeavours.

## GAI Community...

## GAI Member Event & AGM

This year sees the much-anticipated return of the GAI's popular Member Event, offering corporate and individual members of the Guild a unique opportunity for networking, engagement, learning and celebration.

The Member Event, which will incorporate the 63rd Annual General Meeting of the Guild of Architectural Ironmongers, will be held at Staverton Park Hotel and Golf Club near Daventry on Saturday 8 June.

Following the formal proceedings of the AGM in the morning, members can spend the day discussing key issues with an expert panel; exploring new products in the Ironmongers' Village; earning CPD points at seminars running through the afternoon; and networking with colleagues from across the industry. An evening dinner will include the announcement and presentation of the GAI Community Awards 2024 and, after that, members can dance the night away before



ABOVE: Past award winner Bryony Matthews

retiring to their rooms. Golf lovers can also take advantage of the venue by booking a 9-hole game or time on a 14-bay driving range for the Sunday morning. For details, visit www.gai.org.uk/ MemberEvent



ABOVE: The event will be held at Staverton Park Hotel and Golf Club

## AI Specification Awards shortlist announced

In conjunction with the Royal Institute of British Architects (RIBA), the GAI has revealed the finalists for this year's AI Specification Awards.

A total of 32 outstanding architectural ironmongery projects and products have been shortlisted across eight categories:

- Public & Commercial
- Residential
- Hospitality
- Health & Education
- International
- Product Design & Innovation Mechanical
- Product Design & Innovation Electronic
- Ethos Award All category winners will automatically be

put forward for the judges to consider for the Winner of Winners category prize. The results will be announced at an awards ceremony at Southwark Cathedral, London on 18 April 2024.

GAI President Kaz Spiewakowski said: "The quality and diversity of the shortlisted entries clearly demonstrates the many ways this industry continues to innovate in its products, its working practices, and its collaboration with architects and specifiers to create ever-more successful architectural ironmongery solutions."

Read more on p8 or visit www.gai.org.uk/SpecificationAwards



"The quality and diversity of the shortlisted entries clearly demonstrates the many ways this industry continues to innovate" **KAZ SPIEWAKOWSKI** 

## Setting 'A Higher Bar' for competence

A new report from The Competence Steering Group (CSG) – A Higher Bar - Achieving a Competence-led Built Environment – is urging industry to embrace new standards and frameworks and sets out the Group's future.

The report sets out the significant steps being made across the built environment and fire sectors in improving skills, knowledge, and behaviours to drive culture change and improve the safety of buildings. It also details the next steps for the CSG as it looks to accelerate the roll out of the new competence requirements and systems across the built environment workforce.

The CSG, a cross-sector group charged with raising standards for those working in safety-critical occupations, is urging



companies and individuals to adopt new competence practices and measures for a safer built environment.

GAI technical manager Douglas Masterson explained: "Our membership of Competence Steering Group and WG7 (Designers), as well as being cochair of WG12 (Construction Products), has afforded us the ability to represent our members and the architectural ironmongery sector across all levels of the competence agenda.

"We look forward to being involved in the new Industry Competence Steering Group for many years to come." A Higher Bar can be downloaded for free at www.cic.org.uk/shop/a-higherbar-achieving-a-competence-ledbuilt-environment





## GAI member joins call for government to retain BS 476 22

Codelocks was visited by Laura Farris, Newbury MP in February to discuss the critical implications of proposed changes to fire door testing requirements for UK businesses.

The proposed changes from the Department for Levelling Up, Housing & Communities (DLUHC) would see a move away from testing to the British Standard BS 476 22 in favour of testing solely to the European Standard EN 1634-1. The change is expected to have negative consequences for UK businesses. According to GAI, the proposed changes could incur multi-millionpound costs for UK firms, cause potential job losses and remove product choice, all without delivering any meaningful life safety benefits. During her visit, Farris heard about the impacts that the proposed changes would have on business.

Colin Campbell, managing director at Codelocks commented on the issue: "If the proposal goes ahead, then many organisations, including our own, will be unable to specify or sell a significant portion of our products without huge investment in re-testing products that are already approved. The consequences for independent hardware businesses in the UK will be significant. It may seem like a technical issue, but without raising awareness before it's too late, there could be significant delays to projects and increased costs for UK businesses." LEFT: Codelocks MD Colin Campbell with Laura Farris MP

"We are trying to protect the interests of UK businesses against a significant industry change" **DOUGLAS MASTERSON** 

Douglas Masterson, technical manager at the GAI illustrated the scale of the costs: "We are trying to protect the interests of UK businesses against a significant industry change" he said. "The typical cost of the new fire test is about £11,000, with many members having to do substantial amounts of retesting. For example we have one member with 600 affected products, and test times are estimated to be at least six months with a further six months to receive the test reports. It's clear to see how quickly those costs would add up for independent UK firms while also causing massive delays and disruption. The knock-on effect could be large swathes of business leaving the UK."

The consultation on the proposed changes has gathered over 270 responses so far, and the government will carry out an impact assessment ahead of any changes to the law. The GAI has claimed there is no evidence to suggest that this change will make fire doors any safer. It could also introduce the risk of value-engineering and reduced specification for fire doors, effectively making them less safe.

"There is broad consensus that BS 476 22 is fit for purpose," said Campbell, adding: "Many believe the introduction of a mandatory standard or training for fire door installation and maintenance will better address any safety issues."

### GAI scores a hat trick at Trade Association Awards



The GAI was celebrating at the UK Trade Association Awards 2024 in February after winning one award and being highly commended in two other categories.

The awards, organised by the Trade Association Forum (TAF), recognise and celebrate best practice among trade associations in the UK. The GAI won Magazine of the Year for the Architectural Ironmongery Journal (AIJ), which was relaunched in spring 2023 with a new format, design and editorial vision. The Guild was also highly commended for both Publication of the Year for its Architect + Designer's Guide to Architectural Ironmongery and for Best Association/ Supplier Partnership for its work with The Leader Marketing Partnership.

Emily Wallace, chief executive of the TAF and one of the judges said: "The judges were really impressed with how the Guild has built the skills of its team through an embedded partnership to transform their marketing and communications material.

"The Architectural Ironmongery Journal is a case in point – excellent design and a good range of interesting practical and general content for its readers." "The judges were impressed with how the Guild has built the skills of its team through partnership to transform their marketing material" EMILY WALLACE

LEFT: AIJ editor Nicky Roger and GAI head of marketing Marc Sanderson, collecting the award for Magazine of the Year

#### **ADB Wales consultation**

The GAI has responded on behalf of the sector and its members to the Welsh Government's consultation on amendments to Part B (Fire Safety) of the Building Regulations.

This consultation follows similar ones held by the UK and Ireland governments last year, all looking at the potential removal of BS 476 standards in favour of classification to the British Standard version of the European Standard EN 13501, with testing to EN 1634 test standards only becoming the new norm.

In each consultation the Guild has argued that there is no evidence to suggest that this change will make fire doors any safer. It will, however, have significant impacts throughout the architectural ironmongery and construction sectors.

The GAI response to the Welsh Government concluded: "We urge the Welsh Government to retain the acceptance of BS 476 for timber doors in order to help retain a significant body of test data, to safeguard product availability for UK customers, and to protect vital overseas markets which have become particularly important for many UK door hardware manufacturers and suppliers, and are a great British export success story."



#### GAI Education Awards: save the date!

The prestigious GAI Education Awards will take place at the iconic Grand Connaught Rooms in London's Covent Garden on Thursday 28 November.

.....

NOVEMBER

28

The event will feature the presentation of GAI diplomas and certificates, and awards for the top students from around the world. Tickets will go on sale in the late summer once examination results have been published.

### Revised for 2024: The Foundation in Hardware

The new Foundation in Hardware, fully updated for 2024, is now available for enrolment via the GAI website.

The Foundation is a flexible online course for those just entering the sector or beginning their learning journey, providing an ideal induction course for back-of-house, trade counter, support, or new employees at architectural ironmongery or manufacturing

The course covers the basics of architectural hardware, fire and escape doors, and access control 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 work, such as at locksmiths or builder's merchants.

The course contents 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 is open yearround for enrolment, and has 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 on to GAI diploma courses as required. www.gai.org.uk/foundation





#### Architect + Designer's Guide

The GAI's Architect + Designer's Guide was highly commended at the Trade Association Forum Awards in February.

Since its launch at the end of 2023 the GAI's new Architect + Designer's Guide to Architectural Ironmongery has already been accessed several thousand times in both print and digital.

The document is structured around a brand-new overlay to the RIBA Plan of Work, providing 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 innovative new guide has been produced to help architects, 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.

The guide is available to architects, designers and other specifiers via the GAI website at **www.gai.org.uk/specifer**. The GAI is also encouraging architectural ironmongers, manufacturers, and others in the sector to include the guide in their own customer relationship processes.

## SERIOUS ABOUT STARTING YOUR JOUNERY IN ARCHITECTURAL IRONMONGERY?

## PROVE IT

The GAI Foundation in Hardware is an essential introductory qualification for anyone beginning their career in, or working alongside, the architectural ironmongery sector.

Teaching the basics of architectural ironmongery and access control, this flexible online course is ideal as an induction course for those just starting out in the architectural ironmongery sector. It is also tailormade for those who aren't involved in the detail of hardware in their day-to-day job but want to gain a basic understanding of the industry.

The course covers all the basics of hardware, fire and escape doors, and access control in an affordable and convenient learning package:

- Online learning based around 12 modules
- Learn at your own pace, with a full six months to complete the course
- Self-assessment tests and examination
- A printed certificate and access to higher-level GAI qualifications on successful completion.

#### START YOUR JOURNEY IN ARCHITECTURAL IRONMONGERY AT WWW.GAI.ORG.UK/FOUNDATION

#### FIND OUT MORE

The Foundation in Hardware is part of the GAI's education programme, globally-recognised as the mark of professionalism and expertise in architectural ironmongery and related sectors. Explore the full programme at www.gai.org.uk/learning

#### Guild of Architectural Ironmongers

## The cost of entry

From crystal-encrusted entrances to exemplar art deco, here are five doors with the highest price tags in the world







#### 1 The Gioconda Shine Door

The Gioconda Shine door shows a unique copy of the Mona Lisa, the painting by Leonardo Da Vinci. It was created by designer Matilde Durante, for Pinum in Romania. It is made with ecological leather and studded with 31,707 Swarovski crystals with an estimated cost of \$34,900. The Gioconda Shine Door was part of a collection of luxury doors customised with valuable stones.

#### 2 The Ueno Toshogu Shrine Door

The Chinese-style gate of the Ueno Toshogu Shrine in Tokyo Japan has been in existence since 1651. The pillars of the gate are decorated with two carved dragons, a gold foil, several hand carved decorations, including flowers and birds. Legend has it that when it becomes dark, the two dragons on either side of the Shinobazuno-ike Pond descend to drink.



#### 3 The Palmer House Door

The Palmer House Hotel in Chicago has boasted the bronze peacock doors since 1873 when it re-opened after the Great Chicago Fire in 1871. Tiffany designed the doors initially for the C.D. Peacock store that was once located on the first floor. The doors are made of brass, weigh over a half a ton and valued at more than a million dollars.

#### **4** The Palais Royal Door

The King of Morocco's Palace in Fez, Morocco, is hidden behind a series of magnificent brass doors with cedar and zellige decorations. Doors, such as these, are famous in Morocco for being the only ornamental element to grace a home's basic and simple exteriors.

#### **5** Selfridges art deco lifts

These lift doors are one of the most expensive doors in the world. The Art Deco style doors are adorned with bronze and iron panels and features silhouetted images representing the 12 signs of the zodiac.

They were installed by Selfridges department store in the 1920s and were the first electric lifts in the city. They were donated to the Museum of London in the 1970s and can be viewed there when the Museum reopens in 2026.

## 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

n)

# Smarter access for everyone.

Founded in 1991, Codelocks designs and distributes a wide portfolio of innovative, standalone keyless door locks and access solutions for a range of growing markets. Convenience is at the heart of all our products.



Facilities, estates and maintenance managers choose Codelocks to install or replace outdated access control solutions in buildings within the health, hospitality, education, office and leisure markets.



Homeowners and hosts install our locks on home offices, holiday rental properties, sheds, garages and outbuildings.



We constantly innovate to deliver world class products. Codelocks views technology as a key opportunity and our ability to innovate as we develop new products and services is core to our success.



Electronic



Mechanical



**Locker Solutions** 



**Integrated Solutions** 



Discover how our products work for you

Scan Me

codelocks.co.uk sales@codelocks.co.uk 01635 239 645



G 🐰 🞯 🕨 in

©2024 Codelocks Ltd. All rights reserved.