

QUIRKY WORK

INNOVATION
IN OFFICE DESIGN

inside

NEWS

GAI AGM review

PROFILE

AC Leigh

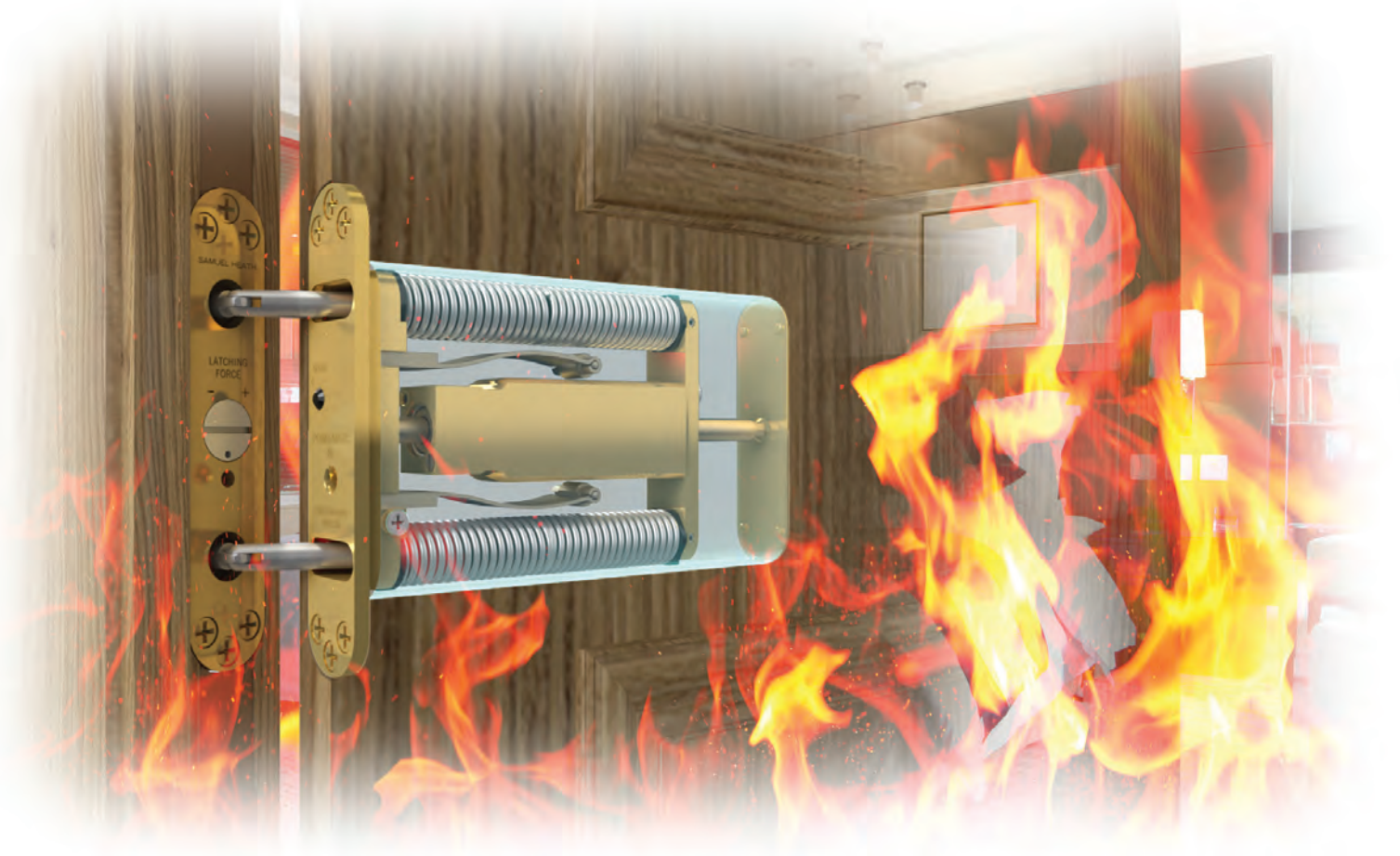
FEATURES

Biometrics
Update
on standards



POWERMATIC®

Concealment when you want it
Performance where you need it



Designed and manufactured in the UK, Powermatic controlled, concealed door closers deliver exceptional performance as well as a host of benefits that surface-mounted closers cannot match:-

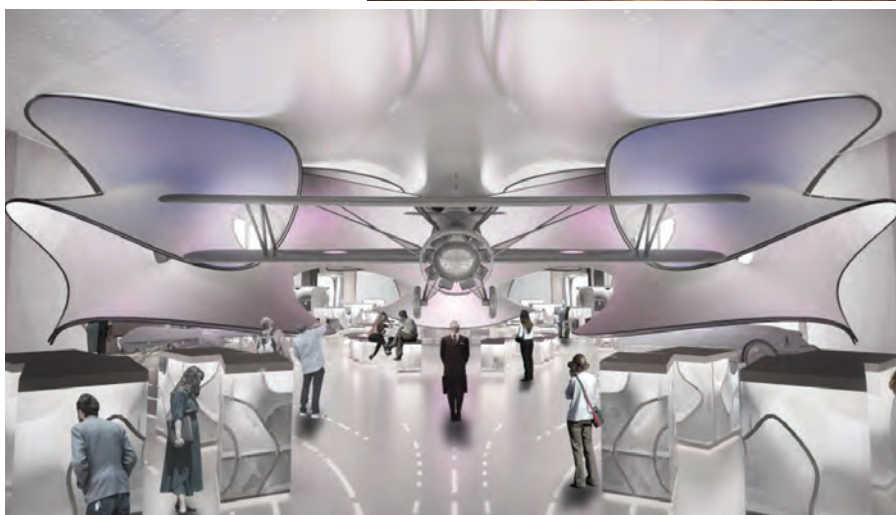
- Superior aesthetics
- Reduced risk of vandalism
- Suitability for anti-ligature applications
- Compliance with relevant fire performance standards for one-hour and half-hour fire doors
- Enable doors to meet accessibility requirements
- Perfect for hotels, healthcare, education, care homes, sheltered accommodation, commercial and many other situations.
- Available in standard and Free Swing models

Visit our new website: concealeddoorclosers.com

Tel 0121 766 4200 info@samuel-heath.com concealeddoorclosers.com

SAMUEL HEATH

since 1820



CONTENTS Summer 2016

NEWS

News	04
GAI and IAI news	10

FEATURES

AC Leigh in profile	16
Innovative office design	18
Student boom for GAI qualifications	24
CPD: Biometrics	26

TECHNICAL

The latest updates to standards	30
---------------------------------	----

NEW PRODUCTS

New launches this quarter	32
---------------------------	----

BACK DOOR

Continuing Zaha Hadid's work	34
------------------------------	----

EDITORIAL PANEL:

Gary Amer
GAI Chief Executive
Tel: 020 7033 2841
Email: gary.amer@gai.org.uk

Lucy Apsey
GAI Marketing Manager
Tel: 020 7033 2843
Email: lucy.apsey@gai.org.uk

Maria Powell
GAI President
Email: mpowell@lorientuk.com

Liz Male MBE
Director Liz Male Consulting
Tel: 01234 712279
Email: liz@lizmale.co.uk

TECHNICAL MANAGER:

Douglas Masterson
Tel: 0330 1234 073
Email: douglas.masterson@gai.org.uk

DESIGN AND PRODUCTION:

Atom Publishing
Tel: 020 7490 5595
www.atompublishing.co.uk

EDITOR:

Nicky Roger
Tel: 07704 336835
Email: nicky@atompublishing.co.uk

ADVERTISING MANAGER

David Smith
020 7490 5595
dave@atompublishing.co.uk

ART EDITOR:

Heather Rugeley



aij is published by The Guild of Architectural Ironmongers.
BPF House, 6 Bath Place, Rivington Street, London EC2A 3JE.
Telephone 020 7033 2480. Website: www.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 view of the GAI. Copyright The Guild of Architectural Ironmongers 2007 ISSN 0959-986x

INTERIORS AWARDS OPEN FOR ENTRIES

Architects, interior designers and product manufacturers are invited to submit their projects for the 2016 The Society of British and International Design (SBID) Awards.

This year brings a new website, updated categories and new additions to the already esteemed panel of judges. The Awards recognise, reward and celebrate all design excellence, from super luxury projects to innovative design and new talent on limited budgets.

Last year, the Awards took in entries from over 41 countries worldwide including Australia, Canada, Estonia, China, Russia, USA, South Africa, Switzerland, the UAE and many more.

Each category undergoes an exclusive two-tier judging process by panels of leading industry experts for both technical content and aesthetic creativity and evaluates elements such as brief compliance, budget, health & safety, and fit-for-purpose design.

The submissions deadline is Monday 11 July 2016. The finalists will be revealed in August 2016, and once announced, members of the public will be invited to cast their vote for their favourite projects online, which will contribute to the overall scores.

Esteemed sponsors and VIPs will be invited to an annual afternoon tea at the House of Lords in November 2016 and the winners will be announced at the SBID International Design Awards ceremony at The Dorchester hotel in London on Friday 25 November 2016.

Entry is free of charge for SBID members and a fee applies for non-members.

The judges this year include new additions Marek Reichman, creative director of Aston Martin and Richard Lloyd, executive director at Which?. They join Lewis Carnie, head of programmes at BBC Radio 2 & 6; Sir Michael Dixon, director at the National History Museum, London; Kevin Mau, senior creative director at The Boeing Company; Jane Preston, facilities manager UK, Real Estate & Workplace Services at Google; David Lewis, managing director of Sunseeker London; Carolina Calzada, managing director at Colour Hive; Patrick Taylor, managing director of Taylist Media; Ben McOwen Wilson, director of content partnerships at YouTube.



Elena Galli Gallini & Spawton Architecture - Sino-Ocean and Taikoo Li Chengdu; Winner of the New Build and Development Category 2015



For more information on the SBID Awards, visit www.sbidawards.com. Check out past winners at <http://www.internationaldesignexcellenceawards.com/past-winners/>

BIRMINGHAM BOOM TO BOOST MANUFACTURERS

Birmingham is enjoying a construction boom according to latest figures. The latest 'crane survey' from Deloitte found that

the UK's second city has seen a significant increase in new construction starts, reflecting both the rise in investor interest and the

year-on-year growth of visitor numbers attracted to the UK's second city. The key findings show:

- Highest level of office construction in over 13 years;
- 693 hotel rooms

under construction;
 ■ 600 residential units under construction;
 ■ 9 completed schemes since the last survey in 2013. This mirrors reports for Manchester and

Leeds which indicate that confidence in developers seems to have returned, and investors are looking towards cities north of the capital to find higher yielding assets offering better value and continued rental growth.

SKILLS AND CAREER FILLIP IN NORTH

A new initiative on skills has been launched in the north of the UK.

The Skills Hub Zone has been created by North England Build to bring together some of the UK's leading universities, recruiters and construction companies to provide students, job seekers and career movers with an opportunity to meet and network with industry insiders offering advice for a career in the built environment.

The Construction Industry Training Board (CITB) revealed recently that in the period up to 2020, there could be as many as 22,500 new construction jobs created in the North West. Despite the perceived skills shortage in the industry, recent trends suggest apprenticeships and vocational training courses are growing in popularity with construction

firms taking on apprentices up by a third in the past year, according to new research released during National Apprenticeship Week in March.

Francesca Berriman chief executive of the Chartered Institute of Architectural Technologists (CIAT) and official partner of North England Build 2016, said: "The skills necessary now, and in the future, to sustain the Government programme of construction work provides the industry the opportunity to showcase the variety of careers available within the built environment/construction sector; the industry is a dynamic and innovative one to choose. It provides practitioners the chance to lead projects from the initial design to the final sign-off of a completed building; that is a real achievement."

ABLOY CREATES EXPERT ELECTRONIC TEAM

Abloy UK has formed a new Electronic Product Sales & Support (EPSS) team, which has been created specifically to support electronic products.

The team will offer services in design and planning, to arranging delivery and installation, and ongoing maintenance and management. The team specialises in a range of products, including PROTEC2 CLIQ, One-CLIQ and Low Energy Locks.

Qualifications in the team range from Microsoft Qualified network and database certificates through to the GAI Diploma.

ASSA ABLOY GETS DOWN TO ZERO



ASSA ABLOY UK's primary manufacturing site has achieved verification from the Carbon Trust that it provides a zero waste to landfill operation.

The Portobello site, based in Willenhall, in the West Midlands, has achieved the verification, confirming that all waste types from ASSA ABLOY are subject to

legislative control in either their handling or disposal.

The Portobello site is one of 14 sites to achieve zero waste to landfill status by 22 December 2015.

Matthew Daly, UK business improvement & sustainability manager, said this is part of a wider sustainability strategy. "During 2015, we successfully completed our five year sustainability program, which included reducing energy consumption intensity by 15% and carbon emissions by 10%. We are now launching a new sustainability program extending to 2020, with increased ambitions."

ARCHITECTS' FAVOURITES



A new book features the most inspirational buildings in the world, as chosen by leading contemporary architects.

50 Architects 50 Buildings is the result of 50 contemporary architects choosing the 50 buildings from around the world that have inspired them and made a lasting impact on their own work. Architectural journalist Pamela

Buxton interviewed each of the architects to create these outstanding portraits of the buildings that have influenced modern architecture. Originally commissioned by the architecture newspaper *Building Design*, the diverse selection is introduced by charity Twentieth Century Society director Catherine Croft, and is illustrated throughout with specially commissioned photographs by Gareth Gardner and Edward Tyler.

The book features a diverse range of remarkable buildings, from housing estates to castles and coalmines to cathedrals. Works by the giants of 20th century architecture including Le Corbusier, Mies van der Rohe and Alvar Aalto are featured, as well as lesser-known gems. Examples include:

- Richard Rogers (of RHSP) on Maison de Verre by Pierre Chareau and Bernard Bijvoet
- Clare Wright (Wright & Wright Architects) on Glasgow School of Art
- Ted Cullinan (of Cullinan Studio) on Chapel of Notre Dame Du Haut by Le Corbusier
- Michael Squire (of Squire & Partners, UK) on Grundtvig's Church by Peder Vilhelm Jensen-Klint
- Marie-José van Hee on Maison Louis Carré by Alvar Aalto
- Eric Parry on Chilehaus by Fritz Höger
- Sarah Featherstone (of Featherstone Young) on the Byker Estate by Ralph Erskine

Join the conversation online: #50Buildings



50 Architects, 50 Buildings (above) includes the Byker Estate (main picture)

University of Salford new student accommodation

DEGREE OF OPPORTUNITY KNOCKS FOR SUPPLIERS

An increase in university student numbers is predicted to result in a rise in construction work in the higher education sector in the UK.

AMA Research reports that the purpose built student accommodation market has emerged as a key investment sector.

The latest forecasts show that the higher education sector is planning to deliver a substantial increase in capital investment up to 2017-18, as competition to attract overseas students intensifies and universities face the impact on the removal of the cap on student numbers from 2015-16. Despite the severity of budget cuts which have hit university finances, many are still going ahead with projects as planned, and an ongoing backlog of refurbishments and upgrades is also boosting the higher education construction pipeline. However, most HEIs have had to review the ownership and maintenance requirements of their estates and consider various outsourcing options. This has led to an increase in partnerships between universities and private sector developers and investors, especially in the student accommodation sector.

Only around 18% of students are currently living in university operated halls, and there remains an acute undersupply of student accommodation in many regions. The 'commercial' student accommodation sector is one of the fastest growing sectors in the property market and there are now over 200 commercial operators in the market. AMA estimates that in 2016 nearly half the supply of student accommodation is now accounted for by private providers and this is set to grow. There has also been a shift towards providing high-end luxury accommodation equipped with designer furniture, wall mounted TVs and VIP bars, designed to attract wealthier students.

In the longer term, the accommodation market is forecast to remain characterised by undersupply in many of the major university towns across the UK, and growing student numbers – overseas student numbers alone are forecast to rise to 870,000 by 2020 – will ensure that the pipeline of new developments will remain buoyant over the coming years.

PREMIER WHOLESALER CHOOSES ABLOY OPTIMA

Security expert Abloy UK has supplied its standalone access control system Optima, to its wholesaler Secure Access Technologies, in order to upgrade the security system used in its offices.

Secure Access Technologies was looking for a wireless access control system, with an easy retrofit, that could be easily removed if the business was to move offices and would provide security and convenience for its business and a company with whom it shares the premises.

Optima provides a completely standalone single door control, operating as an electronic Master Keying system. It incorporates intuitive software and email alerts and can be controlled with a smartphone.

No wiring is required, and it fits almost any lock/type of door, can be incorporated into existing access control systems and can be retro-fitted to existing mechanical lock cases. Secure Access Technologies installed Abloy Optima on five doors, including three shared access doors.



CARE FACILITY FINDS ACCESS CONTROL SOLUTIONS IN DORMA

As part of a multi-phase refurbishment, residential care facility The Grange in Surrey has recently had an access control system with integrated automatic swing doors installed by DORMA. The DORMA MATRIX Professional access control system will provide ease of accessibility for residents with restricted mobility but at the same time help to achieve the desired level of security, and adhere to BS 8300.

Three sets of automatic swing doors were installed. The doors were connected to the MATRIX Professional access control system. Residents present a fob at one of the proximity wall readers to enter the building. A number of XS-PRO Cylinders were also integrated within the access control system and fitted into the locking cylinders of various doors accessed by staff.



AIJ PEOPLE

GEZE UK APPOINTS AREA SALES MANAGER



GEZE UK has recruited Phil Mead as area sales

manager for Kent, Surrey and within the M25 and City of London. As well as manual closers and window technology products, Mead's portfolio will encompass automatic operators and glass products.

Prior to joining GEZE, Mead worked within the access control, communication and security systems

sectors, most recently as specification manager for Aiphone Products.

ALLEGION ON THE BALL



Allegion has appointed a southern area sales manager for the

UK hospitality sector.

Trevor Ball brings a wealth of experience from the hospitality and leisure sectors – two of Allegion's key markets. He will be working closely with hotels to raise awareness of Allegion's portfolio of hotel locking systems.

RADAR

The new 5th generation RADAR lock

The National Key Scheme (NKS) offers disabled people independent access to locked public toilets around the country. As part of the National Key Scheme, our official, new 5th generation RADAR lock has been designed to be retro-fitted to replace existing N&C Phlexicare RADAR lock systems to overcome problems associated with alternative versions of the N&C RADAR lock.



- ♥ Inventors of the NKS lock
- ♥ Trusted over 40 years
- ♥ Can be used by all existing official NKS key holders
- ♥ 6 lever lock operation
- ♥ Meets BS EN 1670:2007 Grade 5
- ♥ Satisfy requirements of BS 8300:2009
- ♥ 6 fixings points for durability
- ♥ Colour contrast backplate to assist in achieving LRV requirements of BS 8300:2009
- ♥ Internal lever furniture tested to BS EN 1906:2012

in association with Disability Rights UK



0845 605 1345 | www.ncphlexicare.com | info@nichollsandclarke.com



ZOO AND UNIVERSITY OPT FOR SECURITY

Twycross Zoo has upgraded its masterkey system and replaced it with ASSA's CLIQ™ Remote system by Rossells Locksmiths.

The Leicestershire Zoo is an internationally important primate conservation centre and has a wide variety of monkeys and all four types of great ape, including the UK's only group of bonobos. ASSA's CLIQ™ Remote system was selected and installed on the gibbon habitat and will be extended across the whole zoo. The system provides intelligent electromechanical locking to allow only those with the necessary authority and training to obtain access to animal enclosures at pre-defined times.

The CLIQ™ Remote system has also been installed in the engineering suite at Loughborough University.

Loughborough University's campus has miles and miles of electrical cabling, gas piping and data



communications, which demand a responsive engineering team to safely and securely maintain the day-to-day requirements of the university.

The engineering suite's master key system is the most expansive on site and required a high security solution that would also deliver a level of convenience, to ensure that administering and managing the large number of keys and cylinders is as easy as possible.

ASSA's CLIQ™ Remote system was installed, providing a simple and intelligent electromechanical locking system to improve security, despite restrictive budgets.



SPILLER CHOOSES BRIO TO MEET BI-FOLD DEMAND

Independent specialist ironmongery company, Spiller has cemented its relationship with sliding door manufacturer Brio to meet growing demand for external bi-fold doors.

The Yeovil-based AI supplies door and window fittings and security products throughout the UK to a wide range of clients, including architects, building contractors, and national and local organisations. Mike Trowbridge, co-manager of Spiller says the most requested hardware for external bi-fold doors is Brio 4S. Spiller has partnered with Brio for four

years as it fits with the company's service policy. "We have supply partnerships with leading industry brands so we can offer customers a portfolio of quality products and solutions. Spiller aligns itself only with manufacturers which offer a premium product and after sales support to ensure customers receive the highest level of service."

Spiller is a GAI member and puts all its spec team through the three-year Diploma course "proving that a high level of knowledge with the ability to compile fully compliant ironmongery specifications has been attained," says Trowbridge. "This also ensures we are fully conversant with the latest British and European standards," he adds.



PROMETAL DOORSET ACHIEVES FIRE CERTIFICATION IN UAE

Dubai firm PROMETAL has achieved fire safety certification for its latched single acting double leaf steel doorset with aluminium decorative cladding.

The door was certified by Thomas Bell-Wright International Consultants (TBWIC) – accredited as a Certification Body (CB) by UKAS in 2014, building on other accreditations as a Testing Laboratory and Inspection Agency. TBWIC is the first CB for fire rated products based within the UAE.

Prometal's door achieved a fire resistance rating of 90 minutes when tested to ANSI/UL 10C at the Thomas Bell-Wright laboratory in Dubai.

Ayman Odeh, managing director of PROMETAL said: "PROMETAL always aims to combine products and services by providing a total solution as per international standards and local government regulations. We also cater to customised requirements in prestigious projects without compromising safety and security."

PROMETAL Metal Industries Factory is a regional manufacturer of high quality certified security and safety doors in commercial, educational, residential, retail, sports, theme parks, oil and gas industries and healthcare sectors covering the markets of the UAE, GCC, the Gulf region, Asia & Africa, Iraq, and Afghanistan. The 15,000 sq m factory is located in Jebel Ali Industrial Zone, and employs 300 staff. In June last year ASSA ABLOY acquired Prometal Group.

DESIGN WEEK DRAWS CROWD

The seventh Clerkenwell Design Week took place in May and was one of the most ambitious events to date for this annual celebration of design and architecture. Clerkenwell is home to more creative businesses and architects per square mile than anywhere else on the planet. Clerkenwell Design Week showcases leading UK and international brands and companies presented in a series of showroom events, exhibitions and special installations. See what you missed at www.clerkenwelldesignweek.com

GROWTH IN DOOR AND WINDOW MANUFACTURING FORECAST

The UK door and window fabrication market has turned from steady decline over several years to growth since 2013, with prospects of further growth over the next five years, according to latest figures.

A new report from AMA Research says the market for door and window fabricators increased by around 3% in 2015, following good growth of 5% in the previous year. The report reviews all sectors of the glazing market, including doors, windows and entrance systems in both residential and commercial applications.

General trends in the economy and construction in particular all influence the sector which is dependent on the performance of a number of markets, often moving in very different directions: private home improvement, public sector housing renovation, housebuilding, and commercial new build and refurbishment for example.

'Residential windows' is the largest sector, driven primarily by replacement demand, though new housing volumes have increased in recent years. However, a strong growth area in the past few years has been

the 'home extension' sector which is driving the growth of bifold doors in particular. Commercial windows and curtain walling have a total share of over 20% of the market and have enjoyed good growth on the back of a recovery in the office construction sector.

While generally a mature sector, the product ranges offered by window and door fabricators have been influenced by the use of composite and hybrid materials, more use of colours, improved thermal performance and locking systems, and demand for bifolds and rooflights.

The supply structure remains very fragmented, comprising a mix of vertically integrated retail glazing companies, PVCu trade fabricators/installers, aluminium systems fabricator/installers, bespoke glazing contractors, composite door manufacturers, commercial glazing specialists, roof light manufacturers, steel window manufacturers and major joinery companies etc.

The diversity of products, materials and applications provides opportunities for major groups operations and small niche suppliers alike.

TECTUS® THE COMPLETELY CONCEALED HINGE SYSTEM



TECTUS®

- › high load values up to 300 kg
- › maintenance-free slide bearing technology
- › three-dimensional adjustability
- › opening angle 180°
- › wide variety of finishes



Visit us at

100%design®

Olympia London

21-24th September
Stand E664

t: +44 121 522 2848
e: sales@simonswerk.co.uk
www.simonswerk.co.uk

GARY AMER • GAI TALK

// By this time next year, we will be celebrating the superb achievements of a group of architectural ironmongers who, working closely with some of the UK's and world's best architectural practices large and small, will have demonstrated the unique partnership between the two professional disciplines.

We will be talking about a whole new crop of projects where the architectural ironmongery is not only visually attractive and enhances the security, accessibility and safety of the building, but also adds to its functionality and longevity. We will be proud – maybe jealous even – of the door hardware industry's best in class.

I suspect one of your projects will be in this class. Maybe it's the one you're working on right now?

Don't be shy. If you feel you may have been involved in a potentially award-winning project – one where technical brilliance has really shone through to solve a practical challenge, a design conundrum or an architectural feat of excellence – now is the time to start thinking about how you're going to promote it.

The GAI RIBA Specification Awards only get awarded every two years, so they're precious. Entries open this summer.

Following a rigorous judging process including site visits to all shortlisted schemes, a 'Winner of Winners' project will be selected from the top projects in the competition's five categories: Commercial Buildings, Public Health Buildings, Public Education Buildings, Hospitality/Residential Buildings, and International Buildings.

We are already planning a glittering awards lunch to take place at the RIBA's headquarters in Portland Place, London at the end of March 2017.

If you want to know more, keep your eyes peeled on the GAI website where further details and entry forms will be appearing soon. And I look forward to being one of the first to congratulate you next year.

Gary Amer
Chief executive of the GAI

IAI APPOINTS NEW
BRANCH CHAIRMAN
IN GULF STATES

Mike Lumsden, general manager of Lorient Gulf LLC, has been appointed the new chairman of the Institute of Architectural Ironmongers (IAI) branch in the GCC.

Based in the United Arab Emirates, Lumsden will co-ordinate the activities of the IAI in the region, including its significant role in supporting students studying for the prestigious GAI Diploma which is very popular in the Gulf States.

The GAI's education portfolio has been developed over 50 years and is the only recognised programme in the world that leads to a qualification in architectural ironmongery on British and European standards. Forty-seven per cent of its students now come from outside the UK.

Lumsden has more than 20 years' experience in senior management roles in the door hardware industry. Before his position with Lorient, he worked with Al Misnad Group in Qatar for 17 years, latterly heading up the trading division.

First established in the Gulf in 2013 by Adam Taylor, general manager of Häfele GCC, the Institute's GCC branch currently has 33 members and is gaining increasing interest as British architectural ironmongery and door hardware suppliers are active in the region.

Lumsden said: "Developers, contractors and specifiers in the Gulf are faced with a cornucopia of different hardware standards from the UK and Europe, USA and Far East. It's very challenging to find a robust specification and architectural ironmongery schedule that genuinely meets the right quality standards on issues such as fire safety, accessibility or acoustics.



"Registered Architectural Ironmongers and IAI members within the GCC are a vital source of authoritative guidance for these clients. Our presence in the market raises the bar, and provides support to those who have to take responsibility for the building's performance.

"I'm looking forward to building on this momentum and the excellent foundations laid by Adam Taylor, getting our existing and future members more actively involved in the branch."

The GCC branch organises a schedule of quarterly meetings for the benefit of its members. The meetings are informal and provide the opportunity to learn, network and socialise. Most meetings also offer CPD opportunities and there is also the possibility of staging social events.

Membership of the IAI is open to individuals who are qualified GAI Diploma holders, students actively on the GAI education programme, or experienced practitioners of the architectural ironmongery trade.

DOOR HARDWARE PROFESSIONALS BETTER SERVED IN THE NORTH

A new branch of the IAI has been set up to support door hardware professionals in the northernmost regions of England.

The North and Borders Branch encompasses the area previously covered by the North East Branch and spans all the way over to the West Coast and the Borders. Meetings are held in Carlisle.

Simon Sutton, national sales manager of Lorient UK, is branch chairman. He says: "The IAI branches provide quality CPD through a structured programme of presentations, and a platform for local architectural ironmongers to voice their opinions. We're also there to encourage networking among the local AI community.

"If you want to further your knowledge, add your voice, talk shop, present your products, or vent your spleen please come along and see us."

The inaugural meeting of the IAI North and Borders Branch in May was attended by more than 20 people including the IAI chairman, Mario Del-Signore, and a host of local architectural ironmongers, GAI Diploma students, manufacturers and industry experts. It featured a CPD session on environmental product declarations by GAI technical manager, Douglas Masterson.

Another meeting included a presentation by Carlisle Brass on enhanced security cylinder and protective hardware, and featured a student evening beforehand for students to discuss and prepare for their examinations for the GAI Diploma.

Further information on all IAI branches and activities can be found at:
<http://www.gai.org.uk/iai/branches>

ENTREPRENEURS FIND A HOME IN THE GAI

Start-ups and new entrepreneurs entering the door hardware industry are being targeted in a future-focused membership drive by the GAI.

A new membership category – enterprise membership – has been created for any business seeking support from the GAI. Any business with just 12 months' trading record can apply to join.

Maria Powell, president of the GAI, says: "Trade associations can quickly suffer and decay if they become just an 'old boys' club'. The GAI is not intending to fall into that trap – we have a vibrant and successful future ahead.

"We are here to provide support and encouragement to the new generations coming through,

and I'm very excited by some of the businesses starting up with a genuine passion for the architectural ironmongery industry.

"This new enterprise membership category tells these entrepreneurs that the Guild is as relevant to them as we are to the most established and prestigious brands in the market, and we can learn from each other."

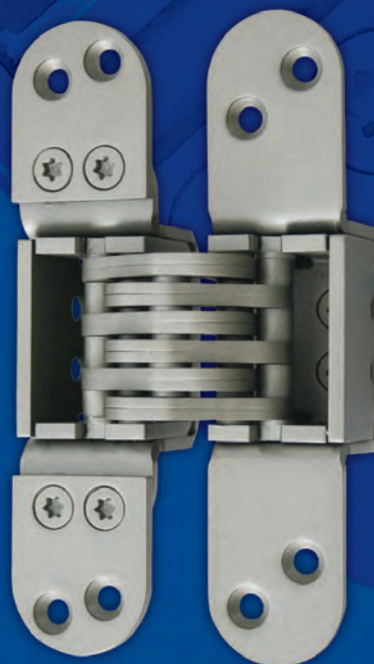
The GAI saw another increase in its membership numbers last year, including 30% of new applications coming from overseas. Two thirds of its members enjoy full membership, the rest are affiliate or associate members.

For membership information go to www.gai.org.uk/gai

DX 30 3-D

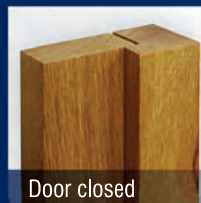
A new three-way adjustable concealed hinge

- Sleek, minimalist design for flush doors
- Three-way adjustable concealed hinge
- Load capacity - 40kg
- Easy, accurate installation
- Manufactured from solid steel components
- Perfect for heavy duty, high traffic usage.



PIVOTA[®]

|B|a|S|y|s|
Bartels Systembeschläge GmbH



Door closed



Door open 90°



Door open 180°


PHOENIX
COOKE BROTHERS

01922 740011

sales@cookebrothers.co.uk

www.cookebrothers.co.uk



GAI AGM AND CONFERENCE GETS A MAJOR RETHINK



This year's GAI AGM was a successful weekend of new thinking, new names and networking

Embracing the theme of 'Rethink', the event was significantly different to previous years. Instead of traditional PowerPoint presentations by the GAI's president and chief executive, the meeting featured a dynamic Prezi-based view of key agenda items and a panel discussion which brought all the issues to life.

Maria Powell, president of the GAI, said in her introduction: "My interest is in creative disruption to stimulate innovation and a radical shift in an industry. It's time for us to rethink everything – starting with ourselves. And it simply would not be right to squander this opportunity to completely rethink our conference too."

The formalities of an AGM have to be observed, of course. GAI officers were duly voted in for their second term: Maria as president, David Stacey as vice president and Julian Newman as treasurer.

"The best AGM and conference yet. It felt like a meeting where everyone was involved and every idea could be discussed." That was just one of the resoundingly positive comments after the GAI's AGM on 21 May at Tortworth Court Hotel in Gloucestershire.





The executive team was also elected, including three new members to rebalance the representation of architectural ironmongers on the board. Julian also provided a healthy report to members on the state of the GAI's finances, and members voted to accept a small bye-law change.

Once this was complete, a panel of experts took to the stage – Gary Amer, GAI chief executive; Rachel Tipton, training and development manager; Douglas Masterson, technical manager; and Liz Male of Liz Male Consulting, the PR consultants helping to significantly raise the profile of the GAI and the IAI.

Maria Powell interviewed each member of the panel, challenging each to report on progress on technical, education, marketing and community activities – warts and all. The result was a much more relaxed, open and informative meeting, and the questions and new ideas from members flowed more freely than at any previous AGM.

Delegates also heard a message of support from Jerry Heppes, chief executive officer of the DHI in the USA.

Maria was also interviewed, telling members about the 'One Future Vision' group and its mandate to review all elements of the GAI and IAI's future development.

// It's a complete strategic examination of where we go next. Everything is up for grabs and we're open to new ideas"

This group is meeting for the first time in June and is looking at the views and ideas that had come from members of both the GAI and IAI and which "could not be ignored".

"It's a complete strategic examination of where we go next," said Maria. "Everything is up for grabs, and we're open to new ideas from everyone."

She reported to members that the group's agenda would include looking at how to transform the status of the organisation and gain recognition as a professional body. This could include potentially unifying the GAI and IAI into one body, re-engineering every aspect of how it worked, rebranding and redefining its role and mission for all stakeholders.

But it could be a three to five-year process, she warned. "We are taking the blinkers off. We're starting with a blank sheet, and we will take time to consult, listen to members and communicate back at every stage."

Following the AGM and continuing the 'Rethink' theme, members enjoyed an incredibly thought-provoking and stimulating talk by leading technology and gadget expert Laura-Jane 'LJ' Rich, whose fascinating perspective on how technology is shaping our future gave insights into how we can harness technology to add value and richness to what we do and how we do it.

LJ Rich provided sneak previews of new technical developments which had direct relevance to the built environment and the way we design and use buildings. This included areas such as 'telehaptics' (computer-generated sensations of touch transmitted over the net); the use of 'invisible computing' using radio frequencies to activate information projected onto surfaces as we walk by or move our hands; and even a brilliant multi-sensory door handle with built in functionality to safeguard dementia sufferers. >>>

Top: (l-r) GEZE's Mervyn Bodley, Jane Bodley, Anita Howland, Andy Howland & Kaz Spiewakowski. Middle: Allegion's Jo Milne-Rowe. Bottom left: Maria Powell with Kevin O'Reilly, Securefast; bottom right (l-r): Dave Heal & Helen Heal, Paula Filer and Steve Filer from Gem Security.

»» She showed how a 30 year-old rollercoaster had been transformed for the future by the use of virtual reality. She gave insights into how technology and people interact, how frictionless purchasing was transforming our expectations of buying goods and services, and how the most radical technological developments are already becoming completely normalised.

The future she painted was one where everything can be analysed and the data used to give every person a tailor-made experience and customised communication, not just great products. Technology was becoming faster, quicker and smaller, and businesses need "informed thinkers" to identify how they would continue to be relevant to an entire generation who switches on its smart tech within a minute of waking up in the morning.

Her message for GAI members was one she was passing on from the former chief executive of Google, Eric Schmidt: 'stay curious'.

"Knowing about new technological developments and trends helps you plan for multiple futures, helps you explore areas for innovation, and create viable new business models which integrate the best of the new with your decades of industry expertise and experience," she said. "You can't stop tech, but you can be informed by it." ■



GAI EXECUTIVE COMMITTEE 2016/17

President: Maria Powell, Lorient Group

Vice President: David Stacey, DORMA UK Ltd

Treasurer: Julian Newman, Oxford Ironmongery Ltd
Steve Bewick, Kaba Ltd
Mario Del-Signore, CES UK Ltd

Paul Duggan, Exova Warringtonfire (co-opted member)
Wayne Harris, HARBRINE Ltd
Gary Hewitt, Spiller Architectural Ironmongery
Alistair Higgins, Allgood plc
Paul Johnson, ASSA ABLOY
Andy Matthews, HOPPE UK Ltd
Nish Mohamed, Em-B Solutions Ltd

Graham Shirville, Allgood plc
Kaz Spiewakowski, GEZE UK Ltd
Gary Amer, GAI Chief Executive

Honorary Life Members of the Executive Committee
Keith Moss MBE
John Planck
David Whitworth

KEY FACTS AND FIGURES FROM THE ANNUAL REPORT

Education

- Launch of Education Hub has led to a 23% increase in Diploma students – 57 more than expected
- 47% of students from overseas, a gradually increasing percentage year on year
- GAI Diploma students from 25 different countries,

including Sri Lanka, Canada, India, China, South Africa and the Gulf

- 26 fast-track learners
- 27 students retaking their exams this year
- 2016/17 will see the first year of students to take their examinations online, under independent invigilation

Technical

- More technical output than ever before – 66 pieces of technical guidance now on the GAI website
- 32 CPD workshops delivered including video CPDs for members based in the Gulf and Hong Kong
- New RIBA-approved CPD materials produced
- 11 Guides to Standards published, covering key standards such as BS 8300,

BS EN 16005, BS EN 1154, BS EN 1155 and others

- New style Technical Briefings include the GAI Guide to BIM, CE marking of doorsets, hotel bedroom locking and opening forces on doors relating to the correct specification of door closers
- Almost 200 technical advice sessions provided over the telephone or by email
- 29% of these queries were product-related
- Technical expertise provided to a wide range of UK and International committees and standards groups

Community

- Sell-out Education Awards in November 2015
- Hugely successful AGM for the IAI in March 2016, including the 'ironmongers'

village' with displays of new products and industry innovations

- Facilitated workshops for both the GAI and IAI, leading to new ideas for the future

Marketing & PR

- Distribution of the *AIJ* has doubled
- More than 1,200 copies distributed of the GAI's new *Guide to the Specification of Door Hardware* for architects since March 2016
- New PR strategy to promote the value of Registered Architectural Ironmongers (RegAI)
- 55 pieces of media coverage for the GAI in 2015, reaching 1.05 million people
- These PR results have already been exceeded within the first five months of 2016.

MORE DATA LESS NOISE



When it comes to acoustics, we combine creative flair with state-of-the-art testing and expertise. The result — a comprehensive range of sealing systems that you know will perform exactly as you need them to in a real door assembly.

For clear performance data, our acoustic app and details of our dedicated testing services, visit our website.



lorientuk.com

NORFOLK BROAD

A changing of the guard at Norwich-based AC Leigh is a strategic move for future growth. **Nicky Roger** reports

AC Leigh will shortly celebrate its 60th birthday but rather than sit back on its laurels in self-congratulatory content it is about to enter a new era in its business life. The East Anglian architectural ironmonger has appointed a new board of directors and has its sights firmly set on future growth.

John Hill, managing director and Leon Buxton, sales director, are both retiring. The new team comprises company insiders who've been promoted from managerial posts to director status. The new appointments will double the size of the board into a six-strong team.

James Millar is the new managing director and he is joined by Alistair Bone, contract sales director, Dan Bradley, security division director, Simon Clarkson, health & safety director, Simon Howlett trade sales director and Richard Ansell financial director.

"It's been a fault and a symptom of the recessionary years that the management team was lean. But now we're investing in new levels of expertise to drive the business forward," explains John Hill.

The new guard all represent different areas of the business, with a director for each division. "We are quite unusual in that we cover all the aspects of AI: we have locksmiths, key bar, masterkey department, we do retail

and trade sales and contract sales. We have a security division and carry out installations of CCTV and access control automatic doors – we are a distributor of Salto," says John.

John explains that although the company had always aimed to have experts in-house, it was often hard to move forward without the right level of expertise. "We have good close working relationships and share ideas and customers across different parts of the business but now we can be more collaborative. We want to grow all of the divisions. We have ideas but we need people driving those ideas forward. This new board will make that happen."

AC Leigh has kick started improvements already with a new 'Click and Collect' service and a new website to sell online to both trade and retail. And it plans to place high importance on the trade counter offering a high end experience in the showroom. "We have a lot of opportunities in different areas of the business."

A man and a van

AC Leigh took its name from its founder, Arthur Charles Leigh. Arthur, an ex WWII fighter pilot who started the business as a man and a van in 1959 selling locks and handles.

Fast forward to 1993 and the business found itself in a tight spot. However, it was rescued and rebuilt by Richard Millar who brought stability to



// We have ideas but we need people driving those ideas forward"

the company and made quality product a touchstone. It is testimony to the employer that it still boasts staff from that era, including the current sales director who has been with the firm for 46 years. And with Richard's son now taking the role of MD the firm remains family-run.

The firm now boasts a turnover of £7m and employs 52 staff across its four sites: the HQ in Norwich, plus operations in Ipswich and Colchester and a stand-alone base for the Security division, also in Norwich. Access control solutions account for about 20 per cent of business with a turnover of



GEORGE ARCHER

£1.45m last year. Much of that income comes from the strong relationships the firm has with its customer base. Key clients include the police and local authorities, Norfolk County Council and the regional education sector. The University of Cambridge uses AC Leigh's in-house team to sell and install solutions for 17 of its colleges. This summer it will be supplying access solutions to Jesus College on 2,000 doors in student accommodation.

It also supplied to the new Norwich Arts University student accommodation, All Saints Green. Also in the city it was involved with

the £30m refurbishment of the Norfolk County Council HQ, County Hall which included 100 automatic doors. It works closely with the Council's architecture department and will soon start work on a dementia village in Bowthorpe as part of a £19m contract secured on the back of similar work elsewhere in the county in Gorleston.

They have been called in on innovative build products like the University of East Anglia's Carbon Neutral Centre and the recently completed King's Lynn Innovation Centre. The housing association, Freebridge is a customer too, most

THE NEW GUARD
L-R: Simon Clarkson, Alistair Bone, James Millar, Dan Bradley and Richard Ansell. Left is Simon Howlett.

recently the Hillington Square redesign in King's Lynn which Wayne Hemingway helped to design. "They have tradespeople working for them who don't understand AI and so look to us for knowledge," explains John.

These strong relationships and AC Leigh's ability to offer an advisory service is central to the AC Leigh philosophy. "With AI it's all about relationships. They have to trust us. We explain costs and stick to principles because we have never tried to be cheap, we have always focused on quality service," says John, citing a quote 'the bitterness of bad quality lingers long after the sweetness of cost'.

"We work on trust and the opportunity to compete. We are often involved at drawing stage and offer a pre and after sales service to help customers through issues. Often products may well meet standards but only just, whereas we take value engineering seriously. We want to specify product for the end user. And we want to be involved at an early stage. We build relationships with architects and external contractors."

Building these relationships means having knowledgeable people on board. Investing in staff is something the business takes seriously. Every employee undertakes GAI exams and a training matrix ensures the right staff have the right qualifications. The business has Foundation and Diploma holders. Anyone joining the company takes the Foundation, and those on the counters sit Level 2, "and we always employ at least one RegAI," John says.

"It's important as it's all we have to demonstrate professionalism in our industry. "The construction and financial industries have a choice of qualifications but we don't. It's a selling point for us with architects. They know what professionalism means in their own industry – they understand CPD programmes – so they welcome it as a recognition of professionalism."

Armed with a new set of directors all working to build on the success of the last 60 years there seems no barrier to this Norfolk business's future goals. ■

WHACKY SPACES

Making workspaces fun may seem fanciful but it results in improved creativity and productivity. **Nicky Roger** explores a few of the most innovative office designs

Above and right Red Bull's offices were designed by Jump Street to stimulate employees and visitors alike, to generate adrenalin and a sense of dynamic excitement, emotions associated with the brand



// We shape our buildings, thereafter they shape us"



Are you reading this at work? Look around you. Is your environment inspirational? Does it foster creativity and productivity? Does it promote collaboration and engagement with colleagues? Or are you looking at a cheap desk, grey walls, and nasty carpet? You might not think that the design and style of your working space matters that much but there is an ever-increasing number of businesses around the world discovering that office design is important. As even Winston Churchill once said: "We shape our buildings, thereafter they shape us."

Many companies are really pushing the envelope in design terms. As part of Clerkenwell Design Week in May Airbnb held an evening discussion about innovative office design following the opening of its three new offices in Singapore, Sao Paolo and London. The premise for its new designs were How to create a brand environment which reflects a local culture'

With offices across the globe, Airbnb's in-house Environments team works closely with local architects to create new and engaging spaces for its employees. Recent openings include Sao Paolo and a new space in Clerkenwell designed with Threefold Architects.

Steve Jobs, a man who dedicated his life to transforming the lives of millions with the design of everyday

things, understood the importance of work space and thought deeply about office design while leading Pixar. He was quoted as saying:

"There's a temptation in our networked age to think that ideas can be developed by email and iChat. That's crazy. Creativity comes from spontaneous meetings, from random discussions. You run into someone, you ask what they're doing, you say "Wow" and soon you're cooking up all sorts of ideas."

Jobs designed the Pixar offices to be more like a campus, with the aim of fostering creativity and encouraging ad-hoc, unscheduled meetings. The people who worked there produced some of the most amazing animated films of all time. Coincidence?

Office space shapes company culture. Your environment is second only to your team when it comes to cultivating a strong sense of common identity. Does putting your senior team in private offices say "open, transparent and flat management structure"? If your business is one where innovation and collaboration are the lifeblood then open meeting areas, open kitchens, large desks and even hot-desking are more appropriate. Famously, Mark Zuckerberg sits on a standard desk at Facebook just with his laptop and in his trademark hoodie.

Your office shapes your communication. Regardless of how good tools like Slack, Skype and >>>

» email are, there is no substitute for the back-and-forth, “always-on” style of face-to-face interaction. Creating a space that helps teams talk more frankly with one another, and removes any obstacles to getting the thinking from your head and into someone else’s is important.

Your office is your second home. We spend a huge amount of time in the office, about 1,920 hours per year, and you are likely to spend more time with your colleagues than your loved ones. If you work in a place where you feel positive and comfortable you can unleash creativity.

A better workplace can foster better social dynamics, more creativity, an increase in productivity, and of course, improve the quality of life of the ones using it on a daily basis.

Crazy cool

There are some incredible projects around the world and in the UK that are pushing the boundaries in this area, creating remarkable spaces for work, and also fostering experimentation about the workplace of the future.

Google really started the whole craze, raising the bar with office design, along with the eyebrows of its competitors, by turning their offices into a sensory overload. Attention to detail was key and employees’ happiness was forefront in their designs. Google’s new London headquarters, are the epitome of quirky cool. The décor can only be described as tongue in cheek ironic fun. Each room is designed within an inch of its life, varying in theme from Grandma’s house to British pub plush. In fact, all of the Google offices around the world are treated with the same quirky edge, uniting the network as one big happy bubble of creativity.

But Google isn’t alone. New York’s miLES storefronts, a network of



Above: BBC Media City UK, Salford

public shared workspaces, won a office innovation prize for its unique ability to combine coffee-shop and office atmospheres. Employees at the Skullcandy’s Zurich HQ can reconfigure their desks to work individually or collaboratively. BBC North in Manchester is designed with ‘velcro and wheels’ flexibility, which enables the space to easily change when needed. A major theme for the Netherlands’ Corporate Campus Apeldoorn is green environment, incorporating open office space with interior landscape design. And London’s Ropemaker Place has ‘meeting tree rooms’, staff pantries on every floor, and open work areas to promote collaboration.

This trend for breaking the mould on traditional office spaces is only likely to continue as ways of working change in the future thanks to technology and globalisation.

Kay Sargent, vice-president of Teknion, a manufacturer of high-end office systems and furniture, points

to Pixar, Google, IBM and Skype as examples of how companies are designing spaces for different ways of working.

At Pixar there aren’t small meeting rooms but rather one large main hallway meant to draw employees together to foster collaboration. Google provides free food, massages, swimming and volleyball. It also boasts an on-site car wash, bike repair, laundry, hair stylist and health services.

There’s a new co-working space in San Francisco that wants to give professionals a more luxurious way to be productive. Mod bills itself as a “brilliant new way to work on the go,” by offering a full concierge service and focusing on wellness (if you spend the day there Mod staff will serve you cleansing juices, healthy snacks and prompt you to meditate or take a walk).

As of now, Mod has only two spaces: one in Phoenix, Arizona and one in San Francisco’s hip Mission District but has ambitions to go worldwide.

“Your office is your second home. We spend a huge amount of time in the office, about 1,920 hours per year”



JAMES CRIDLAND

// This trend for breaking the mould on traditional office spaces is only likely to continue as ways of working change in the future thanks to technology and globalisation”



But it's not just only in America. The UK is bursting with innovative offices spaces. At Red Bull HQ in London the design is modern and fun and includes a ping-pong meeting room and giant slide. Gaming company, Mind Candy, also in London, includes a play den for staff to unwind. Innocent Drinks's head office, known as 'Fruity Towers' is adorned with fake grass and picnic benches. Nike in London oozes its brand with TVs on every wall and sports equipment at every turn. Even Virgin Money and Melbourne Server Hosting – less 'cool' brands – have created vibrant office spaces with Virgin scooping a prize for the 'Best Recycled & Refurbished Workplace in Great Britain' thanks to its sustainable products.

Other great places to work in the UK include The Engine Group, a London based communication group office, the result of a £3.5m project includes circular 'seating pods' made from corian and a room covered



Above New Balance's award-winning European HQ in Warrington

entirely in cork. Banking group Macquarie Ropemaker's impressive East London office covers 217,500 square feet over a staggering six floors, a triumph of open space, bright colours and, the cherry on the cake, the bright red steel staircase and upper-level steel catwalks. At Mother London, UK advertising giants, the whole company sits round one enormous concrete workbench to foster team brainstorming. And in

Bedfordshire Nicolas Tye Architects staff enjoy provides panoramic views of their tranquil surroundings.

Sports brand, New Balance, recently moved its European HQ to Warrington in the north West and its interior was transformed with a funky industrial gym theme. GEZE supplied product to the canteen which provides an informal space to meet, relax and eat for over 100 employees and was commended as a catalyst for improved interaction between staff when the company won the Best Workplace Fit Out Award held by the British Council for Offices.

The doors separate the working space from the canteen which features bold geometric flooring with colourful accents. Aluminium framed glass doors finished in grey satin were chosen to reflect the industrial theme. The space won a 2015 British Council for Offices National 'Fit-Out of Workplace' Award following its Northern regional award earlier the same year. >>>



LONG ZHENG

// Bear in mind your business is probably not Google and just plonking a slide in your office will not transform your productivity

» New Balance commissioned commercial property consultants CBRE to design and manage its relocation to the new offices. It issued a challenging brief for a unique design which provided a solution both in practical terms – primarily storage, display and handling of thousands of items of product – and the company's aspiration for a new type of work environment, which amongst other factors, would help to instill a feeling of pride in the staff.

The new offices contain four large showrooms, product development spaces, meeting spaces, as well as a cafeteria and gym. Much use was made of reclaimed materials such as bricks, sports hall flooring, and oak boards, as well as individually-selected salvaged period furniture to suit the themes of certain rooms. The desk system was also purpose-designed and manufactured locally using reclaimed oak.

Word of warning

Before you go crazy and install a trampoline and juice bar for your staff, bear in mind your business is probably not Google and just plonking a slide in your office will not transform your productivity. Whilst the temptation is to think 'if it works for them it will work for us' Google's international ethos won't necessarily translate to a 20-man office in Huddersfield.

Above: Google Sydney office
Below: Google Cubbyhole
Below bottom: Google Umbono workspace South Africa



PINGTUNG

Businesses need to create a balance between a workspace that is inspiring to staff and one that is still in line with its core ethos. Creating an office that encourages interaction doesn't necessarily mean installing cable cars to serve as mini workspaces, but it has been proven that 60% of workers showed an improvement in productivity in a non-traditional fit-out.

While introducing a futsal table and well-stocked fridge would please most employees, the three main features that are unanimously desired within workers are simply comfort, temperature and lighting.



HALDANE MARTIN

Monica Parker, workplace director at British-based office design firm Morgan Lovell, which has created spaces for Skype, npower, eBay and the British Library, says innovation has to be appropriate. "Wacky workplaces can actually be a bit dangerous because people think that a wacky workplace in and of itself drives some kind of outcome – like, 'Oh, it's wacky, that will make us creative'," she warns. "At the really good wacky workplaces that I've seen, like a Google, there is a sound social science behind the development of that wacky workplace. A brief is created that is specifically aligned to the behavioural outcomes that the organisation wants to achieve. When it's done right, that's the end of a very long process."

When it's done wrong, Parker says, it is often the result of a company cobbling together previous ideas from other firms and hoping for the best. So before you kit out your new office with a grass floor like Innocent Drinks or a treehouse like Mind Candy, ask whether or not it will benefit your staff.

"When you try to force a wacky workplace – a forced fun environment that doesn't match with the people that are in that space – what you get is a very inauthentic kind of workplace," says Parker.

"An inauthentic workplace just feels weird and it doesn't have people that perform as well as an authentic workplace. It's got to be an extension of at least the aspirational culture of the business." ■



Security Tech Germany

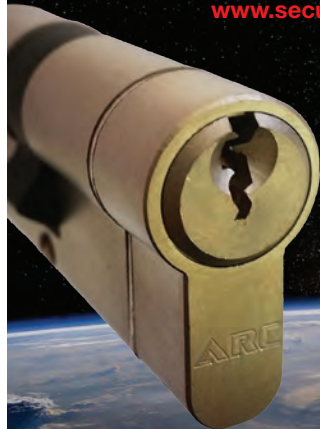
New To Titalium™ Range - 96TI and 98TI



www.abus.com



www.secure-arc.com



S-R Range

Anti-Pick
Anti-Drill
Anti-Pull
Anti-Snap

R-R Range

Anti-Pick
Anti-Drill
Anti-Pull
Anti-Snap
Anti-Panic
Fully Restricted Key Profile

Bespoke

Bespoke Keyed Alike
Bespoke Master Keyed Systems
Classroom Function
Anti-Barricade Function
Anti-Ligature
Special Size Requirements
Bespoke Colour Requirements

Off the Shelf

Keyed to Differ - Architectural
Keyed to Differ - Contract
Keyed Alike
Stock Master Systems
WC Cylinders

Same Day/Next Day Dispatch

Great Products that don't cost the Earth!

Secure ARC Ltd, Unit 36 Waterloo Ind Est, Bolton BL1 2TN
Tel: 01204 393212 Fax: 01204 521752



TESTING POSITIVE

The number of students taking GAI qualifications is on the rise, thanks to the new Education Hub

Across the world many in the AI industry are now eagerly awaiting their results having taken a GAI exam in June. This year the number of students sitting for a GAI qualification has increased dramatically.

Numbers signing up for the GAI's Diploma programme have leapt since GAI launched the Education Hub in September 2015 to make its huge wealth of educational resources available globally via the web. Total enrolment is up by 23 per cent on the previous year.

This year over 380 students from 25 countries studied for the same GAI courses. This is up from 311 last year. Nearly half (47 per cent) of the students are based outside the UK, with Hong Kong and the Middle East being particularly keen.

The GAI offers the only recognised programme in the world that leads to a qualification in architectural

ironmongery to British and European standards.

Identified by GAI members recently as the brightest jewel in the Guild's crown, the education programme has been running since 1961 and has built up an international reputation.

The Education Hub is its latest development, making the entire range of GAI education, Certificate and Diploma qualification and CPD (continuing professional development) materials available online for the first time.

Its enhanced, interactive learning platform is designed to be more engaging and accessible for learners, making use of animations and video clips. It also offers students greater flexibility to choose when and where they study.

The majority of students currently signed up on the Education

Hub are studying for GAI's Certificate in Architectural Hardware qualification, a two-stage programme which leads on to Stage 3, the much sought-after Diploma qualification.

The Hub also offers a Foundation in Hardware for those seeking an insight into the basics of architectural ironmongery, and CPD to keep those already qualified up to date.

Forty two venues held GAI examinations in June: 26 overseas and 16 in the UK with 24-hour support from GAI and e-learning provider, Cortexa.

Primarily Stage 1 & 2 exams in the UK are running in Pitman Training Centres, the same as used by the DVLA for driving theory tests.

The GAI is working with the British Council for most overseas exams.

Stages 1 and 2 are PC based examinations.

They are 90 mins long and comprise 120 questions. 10 questions per topic.

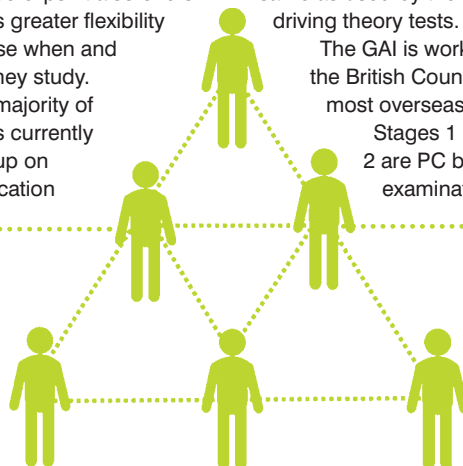
Stage 3 is a written 4-hour scheduling exam. This year was the last year it was a written text; it is also being transferred to computer-based testing for 2017.

Gary Amer, chief executive of the GAI, commented: "This significant increase in interest shows just how far we've come in creating an online learning environment that answers students' requirements for greater flexibility, and benefits those who can now easily fit their studies in around their working lives."

A learner experience survey suggests a large majority of those using the Education Hub rate their learning experience as positive. ■



For further information, or to sign up for any courses, go to <https://educationhub.gai.org.uk/>



SECUSTRIP ANTI-JEMMY STRIP

ZEROplus

NEW TO ZERO, THE SECUSTRIP PLUS ANTI-JEMMY STRIPS FEATURE TWO INTERLOCKING STEEL PROFILES THAT ARE FITTED ON THE OUTSIDE OF THE DOOR TO PROTECT THE GAP BETWEEN DOOR AND FRAME AGAINST INTRUSION. UPON CLOSING THE DOOR, THE TWO STEEL STRIPS FIT TOGETHER, AND ARE INGENUOUSLY DESIGNED TO MAKE ATTACK BY JEMMY, CROWBAR OR SCREW DRIVER MORE DIFFICULT ON THE LEADING EDGE OF THE DOOR. THEY CAN ALSO BE FITTED TO WINDOWS. THIS PROVEN PRODUCT IS MANUFACTURED IN HOLLAND AND OVER 4 MILLION SECUSTRIPS HAVE BEEN SOLD IN HOLLAND TO DATE.



THE PRODUCT IS AVAILABLE FROM STOCK IN WHITE AND BROWN IN TWO DESIGNS; **TYPE 2** FOR INWARD OPENING DOORS (TYPICALLY FRONT DOORS) AND **TYPE 3** FOR OUTWARD OPENING DOORS.

FIXINGS ARE SUPPLIED FOR WOODEN DOORS BUT SECUSTRIP PLUS MAY BE FITTED TO ALUMINIUM, STEEL AND PVC DOORS.

Zero Seal Systems Ltd
Units 43 - 45 Ladford Covert, Seighford, Stafford, ST18 9QG, United Kingdom
Tel : +44 (0)1785 282910 E-mail : sales@zeroplus.co.uk

WWW.ZEROPLUS.CO.UK



ART DECO
©
CARLISLE BRASS

Carlisle Brass are thrilled to unveil the Art Deco Range...



Beautiful designs meticulously created in house from concept to completion.
www.carlislebrass.com



UNLOCKING THE DOORS OF OPPORTUNITY



SAFETY AND PERFORMANCE OF DOORSETS AND BUILDING HARDWARE

- New European Testing Laboratory
- Fire, Security, Environmental and Endurance Testing to UL, EN and BHMA Standards for Global Market Access



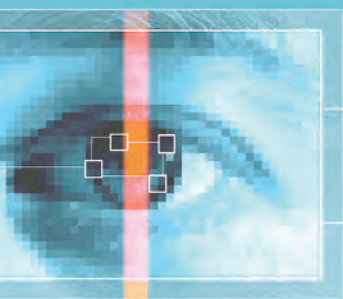
Learn more here:
bit.ly/uleulab

UL Door and Hardware Laboratory
Warrington, United Kingdom
E: BuildingLifeSafety.eu@ul.com
T: +44.1925.258.876
ul.com/buildingmaterials

UL, the UL Logo, and UL certification marks are trademarks of UL LLC © 2016. Other marks are the property of their respective owners.

THE EYES HAVE IT

Is biometrics purely the province of millionaires, government security and Hollywood blockbusters? Or is it a universal technology that reduces costs while enhancing security? **Devi Sohanta** reports

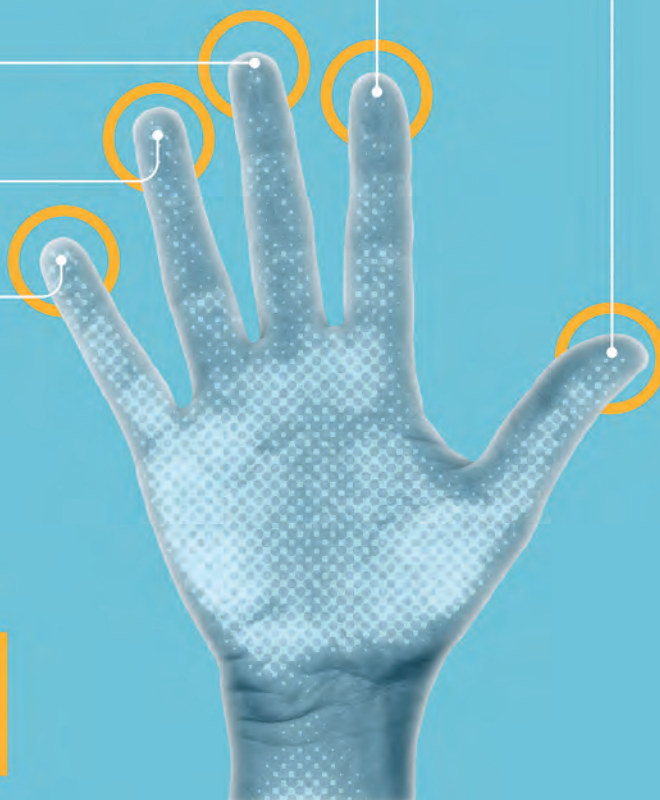


>94291297100

>49801900μ07

>5Δ12570121+

234567890+
1234567890+
1234567890+
1234567890+
1234567890+
234567890+
234567890+
1234567890+
34567890+
1234567890+
1234567890+
1234567890+



Passwords can be forgotten, keys can be lost, but you don't leave home without your fingerprints. That's why biometric technology is simple. Simple to use and simple to install. But over the past 10 years, it's not been so simple to understand the market.

From the start, the performance of biometric technologies has not matched the promises made by the industry. Distributors and installers were quick to embrace the new technology, but didn't have the knowledge or technical support from manufacturers to implement it effectively. This has led to disillusionment and disappointment.

That's why I've set up the Global Biometric Centre of Excellence, to provide education and information about the sector, and set out some clear guidelines for standards of performance so it will be easier for distributors and installers to make good choices.

Defining the market

Biometrics refers to the technologies that measure and analyse human physical characteristics for the purpose of verifying the identity of an individual. This includes fingerprinting, eye retinas and irises, voice patterns, and vein or facial patterns.

Currently, security relies upon a user having a unique property. It uses a unique PIN, password, key or card. Biometrics fits into this, by using something that you are – a unique fingerprint, hand, iris, retina or voice. The overwhelming advantage of biometrics is that it can provide true identification.

And there are more advantages too. Importantly, a biometric sample cannot be shared or copied. Identification through biometrics eliminates the possibility of multiple enrolments of the same user in a database and reduces the burden on users with a growing list of passwords, user IDs, and other >>>

KitLock gets smart.



Flexible access control for lockers, cabinets and enclosures.

The KL1550 Smart locker lock can be programmed, managed and opened in multiple ways. The lock provides keyless access via smart card or code and supports NetCode, Codelocks web-based application, allowing remote code generation. Send codes via SMS or email for instant one-time access. The optional tablet allows operators to upload selective programs and features and download audit data on demand in a matter of seconds.

Be Smart. Go Keyless. Go KitLock.

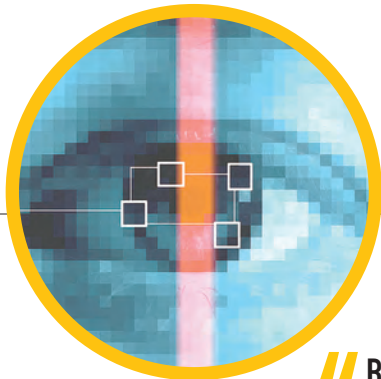
To find out more contact:

+44 (0) 1635 239645

Visit: www.codelocks.com



CODELOCKS



// Biometrics can save users money over the lifetime of a system so it's easier to build the business case"

» codes to remember. It also eliminates the costs of password and PIN maintenance as well as card or lock replacement.

There is a need for true identification across the built environment. The consequences of insecure authentication in a homecare, hospital, schools or corporate environment can be catastrophic, with loss of confidential information, money and compromised data integrity as well as a risk to human safety.

Growing market

Biometric technology has developed from a new technology used in a narrow band of closed environment applications to a useful, practical, fit-for-purpose tool used across a wide range of industries and in a variety of applications. Biometrics is witnessing rapid adoption among both public and private sectors worldwide as an accurate, reliable, and cost-saving way to offer better and advanced security surveillance. Increasing security concerns – ranging from individual identity theft and corporate security to national security – are driving the global biometric market.

In the UK, the use of biometrics in access control environments is still relatively new. Products in use are predominantly in door locks and retail prices seem high, compared with traditional applications. But the way the industry is viewing the cost of biometric technology is changing.

It is clear that biometrics can save users money over the lifetime of the system, so it's easier to build the business case for biometrics. There are lower administration costs – users simply register their fingers in a



TOP: Iris recognition; Connective touch staff (middle) work on fingerprint technology (bottom)

biometric system and unlike passwords, PINs, cards or keys, there's no need for ongoing administration.

There's also lower support costs as biometric systems eliminate calls to help desks for forgotten passwords or PINs. In fact, according to one American survey, the cost of forgotten passwords was \$150 to \$300 per person every year. In offices, schools and housing associations, security is compromised every time a user loses a key, or personnel changes. There's a cost attached to changing a lock or replacing a card, but this is eliminated with biometrics.

Once the business case has been made, the challenge is for manufacturers to ensure that biometrics systems are easy to use, simple to install and integrate well into existing building management systems. Most importantly, they need to meet high standards of effectiveness.

If this can be achieved, the future for biometrics looks bright. During the next 10 years it has been predicted that the cumulative revenue for the global biometric market will reach \$67.8bn, based on research by market intelligence firm Tractica.

Consumer attitudes to biometrics are also warming. The introduction of Apple Pay and now Android payment systems is bringing fingerprint technology to the masses. As confidence in the technology grows, adoption will increase and the demand for biometrics will escalate. ■

Devi Sohanta is Founder of the Global Biometric Centre of Excellence and leading fingerprint technology Connective Touch.

BIOSCIENCE BLOCKS BURGLARS

Bio-science is not only being used to improve access control but also in innovative ways to prevent entry. A new product to the market, AIM is a forensic alarm system designed to deter force entry. When attached AIM marks an intruder with DNA tracing technology linking them to the scene of the crime. It works by detecting forced intrusion of the door which triggers an advanced security defence system: the intruder is covered in an invisible quick drying spray that is DNA coded and only visible under UV light. Each system contains a unique code spray which is stored on a register and links the DNA marking spray to an individual's home. Any intruder marked with the DNA spray is then traceable to the registered address. To avoid mistaken activation of the mechanism, a definite illegal action is required. For example, an individual aggressively attempting to force entry will provide sufficient force to fire the mechanism. A high decibel alarm sounds at the same time as the forensic trace liquid is expelled. It will remain on clothes, skin or hair for weeks/months dependant on exfoliation and washing frequency.

Marketed by Avocet Hardware as a solution to aggravated burglary and doorstep crimes, the product has been developed in the UK and has received a product of value award from the Society Of Professional Locksmiths in the USA and is currently used by police forces in Merseyside, Worcester & West Mercia, Staffordshire, Warwickshire, Bedfordshire and the West Midlands

To see the technology in action visit: <https://vimeo.com/164392009>



NEED HELP ON BIM?

www.bimplus.co.uk

BIM+

NEWS • PEOPLE • PROJECTS • TECHNOLOGY • MANAGEMENT • EDUCATION • CPD • JOBS



CHANGES AS STANDARD

GAI technical manager, **Douglas Masterson** provides updates on the latest changes to Standards

Standards are of huge importance to us in the ironmongery industry, they have a massive impact with regards to the specification of the correct product for fire, smoke and escape doors. As they are being constantly created, revised and rewritten the following is an up to date report on what is happening with some of the most influential standards in our industry. Any dates given are correct at time of going to press and it should be noted that these are often subject to change.

HARMONISED STANDARDS

Harmonised standards are of vital importance as, from 1 July 2013, under the Construction Products Regulation (CPR), it became mandatory for manufacturers to apply CE marking to any of their products covered by a harmonised European standard (hEN) or Technical Assessment. At the GAI we have constantly cautioned specifiers that, from this date, there are important responsibilities for the manufacturers, distributors and specifiers of fire door hardware which have legal implications throughout the supply chain.

So what do we mean by a harmonised standard? This is a European standard developed by a recognised European Standards Organisation such as CEN or CENELEC. Manufacturers, other economic operators, or conformity assessment bodies can use harmonised standards to demonstrate that products, services, or processes comply with relevant EU legislation. They provide a technical basis to assess the performance of construction products. They also enable manufacturers to draw up a Declaration of Performance as defined in the Construction Products Regulation, and affix the CE marking. The references of harmonised standards must be published in the Official Journal of the European Union (OJEU).

RECENTLY PUBLISHED STANDARDS

The following Standards have been either recently revised or created:

BS EN 13637: 2015 Electrically controlled exit systems for use on escape routes.

This new standard was published in June 2015 and specifies the requirements for performance and testing of electrically controlled exit systems, specifically designed for use in an emergency or panic situation on escape routes. This Standard has not yet been entered in to the Official Journal for CE marking.

BS EN 1303: 2015. Cylinders for locks. The revision to this standard was published in June 2015 and supersedes the 2005 version. The changes from the previous edition include additional grades for attack

resistance, changes to operation at extreme temperature, development of the plug extraction test and adds new grades for suitability for fire and smoke resistant doors. It should be noted that this is not a harmonised standard (hEN) and therefore cannot be CE marked against. The GAI Guide to Standards on BS EN 1303 highlights the difference between the two versions in more depth as well as providing further detail on its content.

PAS 24:2016. Enhanced security performance requirements for doorsets and windows in the UK. The latest revision to this standard was published in February 2016 and replaces the 2012 version. This incorporates a wider scope than previous, increases the range of security doorsets and windows to be covered, simplifies a number of test methods and also includes more robust requirements for letter plates. It addresses the requirement for easy egress from all new build dwellings instigated by the NHBC (National House building Council), by ensuring all doorsets are suitable for use with thumb turn cylinders and other easy egress

hardware. It also contains a single option to ensure all doorsets can be used with easy egress hardware.

STANDARDS DUE FOR REVISION OR PUBLICATION:

The following Standards are in the process of being revised or created and are due to be published within the next 12 to 18 months:

BS EN 12209: 2003 Mechanically operated locks, latches and locking plates. The BS EN 12209 revision is in its final stages prior to publication. This will be a significant change to the 2003 version and it is anticipated that the new revision will be published by BSi before the end of 2016. The new version will remain unharmonised (meaning products cannot be CE marked to the 2016 version) until the Commission agree its publication date into the *Official Journal of the European Union*.

BS 3621: 2007+A2:2012. Thief resistant lock assembly – Key egress. Due to the recent changes to BS EN 1303 and anticipated changes to BS EN 12209, BS 3621 will be revised in order to become aligned and therefore minimise any potential conflicts. This new amendment will still have to go through Draft Public Comment, and it may well be impacted by the date of publication of the revision of BS EN 12209. The related standards BS 8621 and BS 10621 will also be amended in line with BS EN 1303 and BS EN 12209.

BS 8214: 2008. Code of Practice for fire door assemblies. This is currently

under review with the latest revision of this standard due for Draft Public Comment in the summer of 2016. Publication of the revised standard is anticipated late 2016.

BS 8300: 2009+A1:2010. Design of buildings and their approaches to meet the needs of disabled people. Code of practice. This is a document which is of huge importance to our industry and which is currently under revision. It is likely to be available for Draft Public Comment early 2017 with publication due mid 2017. Any relevant changes made to this standard will be communicated to our membership.

Draft BS 8613. Finger protection devices at the hanging stile. This will be a new BS Standard relating to test procedures for finger trap protection devices. This should be available for Draft Public Comment in the summer of 2016 with a view to publish early 2017.

WHAT IS HAPPENING WITH CE MARKING OF DOORSETS RELATING TO BS EN 16034:2014?

The time scales on CE marking of doorsets have been subject to ongoing change. The previous date of applicability and the start of the co-existence period published by the European Commission was 1st September 2016. This meant that doorsets could not be CE marked until that date. It had also been confirmed that the co-existence period for existing National Standards would run until 31st August 2019, thus giving a full 3

year period. The GAI has recently been made aware that the 1st September 2016 date may possibly change following a meeting in Europe of Technical Committee TC33, CEN and the European Commission. This is due to work which was to be completed on conflicting EN Standards relating to fire doors not being likely to be finalised in time for the 1st September. The conflicting Standards in question are: EN 14351-1 (Windows and external pedestrian doorsets), EN 13241-1 (Industrial, commercial and garage doors and gates) and EN 16361 (Power operated pedestrian doors). The new date of applicability has not yet been confirmed, it is therefore advisable to keep a watchful eye on the Commission update of the *Official Journal of the European Union* between now and September for an official change in date. It may now move closer to the end of 2016. The GAI will continue to keep its membership aware of any further developments.

WHERE CAN I GET FURTHER INFORMATION ON STANDARDS?

The GAI has recently published a series of Guides to European and British Standards which are most relevant to our industry. These explain not only what the standard itself is but also provides some information on the products it relates to. There are a total of 10 publications on the following standards:

- BS EN 1154
- BS EN 1125
- BS EN 12209
- BS EN 1906
- BS EN 16005
- BS EN 1155
- BS EN 179
- BS EN 1935
- BS EN 1303
- BS 8300

There is also a guide entitled *An Introduction to Standards* providing further background and history to the standardisation process. These can all be downloaded from the technical section of the member's area of the GAI website under 'Standards and Regulations'.

The GAI will also continue to provide information on changes to Standards on an ongoing basis through Stop Press e-communications or Technical Briefings. ■

// The GAI has recently published a series of Guides to European and British Standards which are most relevant to our industry.

If you have any further questions relating to Standards please email Douglas Masterson at technical@gai.org.uk

The following is a list of harmonised standards relevant to our industry:

PRODUCT TYPE	BS EN NUMBER	USAGE LOCATION
Single axis hinges	BS EN 1935	Doors on escape routes and fire/smoke control doors
Door Closing Devices	BS EN 1154	Fire/smoke control doors
Electrically powered hold open devices	BS EN 1155	Fire/smoke control doors
Door co-ordinators	BS EN 1158	Fire/smoke control doors
Locks and latches	BS EN 12209	Fire/smoke control doors
Electromechanical locks and latches	BS EN 14846	Fire/smoke control doors
Emergency Exit	BS EN 179	Locked doors on escape Hardware routes
Panic Exit Hardware	BS EN 1125	Locked doors on escape routes

NEW PRODUCTS »



A NEW ANGLE ON MAILBOX SECURITY

The new DAD 3700 mailbox features a 45 degree sloping body design which acts an anti-theft measure. The boxes are fully Secured by Design compliant.

Mail is delivered through the flap and over the integral anti-theft device before dropping down a chute to the back of the box.

The mail is retrieved through a front opening door with a security lock. It is supplied with two numbered keys with 500 variations.

The DAD 3700 is ideal for apartment blocks, student accommodation and commercial blocks. Made from one piece plate with no screws visible from the outside or inside. The plate can be made with either powder coated aluminum, silver anodized aluminium stainless steel or in any RAL colour.

» For more information visit dadgroup.co.uk



CODELOCKS UPDATES LOCKER LOCK

Codelocks has introduced a series of product updates for its Locker Lock, the Kitlock1000. New features include a battery level indicator, slam latch accessory and six-digit NetCodes, designed to make the operation and maintenance of the locks much easier to control and manage.

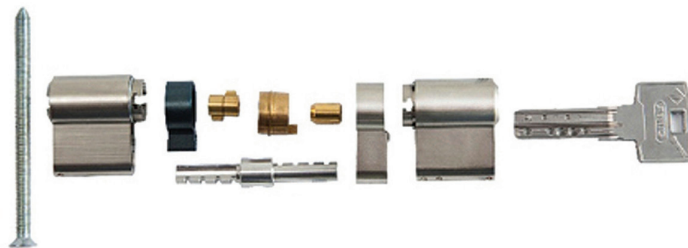
The firm says the new enhancements are borne from demand particularly for more connectivity. The NetCode application allows users to generate lock codes from a remote location and send them to the person requiring access via email

or SMS. The new product features include: battery level check; slam latch accessory which allows effortless shutting of the locker door. The latch can be retrofitted to existing products or purchased for new installations.

The new KL1060 will operate with six-digit NetCodes instead of 12.

A shorter access code is an obvious benefit to the person receiving and using the code, as they are less likely to make mistakes when punching it in.

» www.codelocks.co.uk



ABUS OFFERS TOOL-FREE CYLINDER

ABUS has launched its ModularMX cylinder system, compatible with existing ABUS Bravus, Vitess and Zolite euro double and thumbturn patented and trademark protected cylinder systems. ModularMX offers maximum flexibility for quick tool-free modification and fitting of nickel cylinders ranging from 30/30mm to 70/70mm – without the need for stock of every cylinder size.

Locksmiths driving to an on-site service call or emergency callout, won't know the cylinder lengths required: ABUS ModularMX offers the ideal solution. The Modular system variants allow locksmiths to react to the onsite requirements in a flexible and secure manner, saving time, stock and avoiding costly return trips.

Using just a few simple steps, the basic length of 30/30mm can be extended on either side at 5mm intervals, up to a cylinder length of 70/70mm, using just a screw for onsite convenient modification.

ModularMX variants also include as standard an anti-drill inlay made of high strength stainless steel, with hardened steel pins inside the cylinder to offer increased protection against drilling. The stainless steel modular threaded bore hole also ensures additional anti-pull protection.

ModularMX is available in various serviceable formats, all with tool-free modification offering an all-round security convenience for locksmiths.

» For more information visit www.abus.com

TECTUS HINGES: CONCEALED PERFECTION

SIMONSWERK TECTUS offers a complete solution and extensive range, with multi award winning design and precise engineered functionality.

TECTUS hinges allow for three dimensional adjustments to obtain perfect door alignment, contain maintenance free bearings and present a flush fitting clean line design. Created for safety, with minimum pivot gaps to prevent finger injury, these hinges are available in an unrivalled range of high quality surface finishes and size options carrying up to 300kg door weights.

The TECTUS A8 versions accommodate door fascias and claddings up to 8mm,

allowing for glass or laminate door designs and the TECTUS "Energy" option integrates permanent power transfer.

» For more information please visit www.simonswerk.co.uk



ALLEGION UPGRADES BRITON OUTSIDE ACCESS DEVICES

Specialist security manufacturer, Allegion, has launched upgraded outside access devices (OADs) by Briton.

The all-new design offers a host of innovative features, including antivandal design and return-to-door lever handles which have full compliance with the dimensional requirements within BS 8300, making this a valuable upgrade to Briton's panic hardware range.

Briton OADs are an important and trusted product for buildings within a wide range of sectors, such as commercial, education, healthcare and transport, because of the simple and robust means they provide for allowing



access through emergency exit doors from the outside without compromising the security of the building. The new devices are suitable for both single and double doors, when fitted to the first opening leaf of a pair. They can be self-handed or site reversible, and they are supplied with a euro profile standard differ cylinder. The products are suitable for doors between 40mm and 100mm thick.

» For more information please visit www.allegion.com/uk

DORMA'S NEW MANUAL SLIDING DOOR SYSTEM

DORMA has launched its latest manual sliding door system for glass and timber doors. MUTO is easy to fit with the ability to access all functional elements through a removable front cover. In addition, DORMA's new Clamp & Glue technology allows for the installation of laminated safety glass (LSG) without the need for glass preparation.

The MUTO is suitable for glass or timber door applications, with a

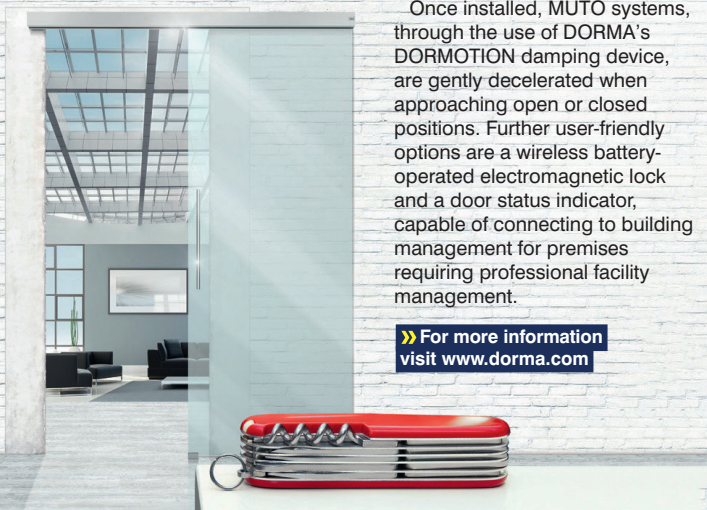
capacity for panel widths of up to 2500mm and weights from 50kg to 150kg.

Flexibility and functionality are key benefits. The system is suitable for wall, glass or ceiling mounting, while a special interconnecting profile also allows for fitting to false or suspended ceilings.

MUTO is also available with a Synchro option enabling the opposite door panel to open or close as the first one moves.

Once installed, MUTO systems, through the use of DORMA's DORMOTION damping device, are gently decelerated when approaching open or closed positions. Further user-friendly options are a wireless battery-operated electromagnetic lock and a door status indicator, capable of connecting to building management for premises requiring professional facility management.

» For more information visit www.dorma.com



ABUS ADDS NEW HIGH SECURITY PADLOCKS TO TITANIUM RANGE

The launch of TITANIUM 96 and 98 padlocks complements the ABUS' TITANIUM range with two new high security padlock styles. Both feature a solid steel look lock body and high tech reversible keys. and are designed to deter thieves.

The padlocks feature wide strong shackles (and very limited attack versions) to provide resistance against cutting tool attack.

The cylinders feature a 10 pin key system with 150,000 differs, whilst end

users benefit from the ease of using a reversible dimple key.

The 96TI padlocks are available in 50mm and 60mm, with open and closed shackle. The 98TI Monobloc style is available in 70mm and 90mm.

» www.abus.com



GEZE UK LAUNCHES SMALL AND MIGHTY SYSTEM

GEZE's new sliding door system, the Levolan 120, belies its modest appearance: the slimline fitting can effortlessly move internal doors of up to 120kg.

It has twice the load-bearing capacity of its little brother, the Levolan 60 but shares its discreet aesthetic: with straight lines and modular composition, which includes integrated derailing protection and can be conveniently installed from the front.

This means that large panelled sliding doors – made from glass, wood, metal or plastic – can be put in place in the knowledge that their practical application can be effectively managed.

Additional safety is provided by the Levolan 120 SoftStop draw-in damping device.

The system has specially designed roller carriers, which

ensure outstanding load distribution enabling the leaves to move easily and almost silently. Its derailing protection is triggered automatically when the height of the door leaf is adjusted.

The clamping roller carriage is designed for glass thickness of 10-12.76mm which allows the Levolan 120 to be installed with door leaves made of laminated safety glass.

Its compact dimensions make it extremely versatile meaning it can be installed on a wall, suspended from a ceiling or glass fanlight or invisibly mounted within a ceiling.

The Levolan Smart fix installation system makes fitting fast and straightforward and its modular composition means it can be provided as ready-made sets.

» For more information visit www.geze.co.uk

IMMORTAL TALENT

Continuing the legacy of Zaha Hadid



It was with shock and great sadness that the architectural world greeted the tragic news of Zaha Hadid's death back in March. An award-winning, provocative talent, dubbed the 'Queen of Curves' for her designs, she leaves behind an incredible body of work. However, there were so many projects still in the pipeline and underway. What will become of those? Her office has vowed to continue her work and keep her ethos alive saying: "Zaha is in the DNA of Zaha Hadid Architects. Zaha trusted everyone to achieve the potential she saw in them, to never stop questioning, to never stop imagining, to realise the fantastic. She continues to drive and inspire

ABOVE: Mathematics Gallery, Science Museum, London (left); KAPSARC, Riyadh (right)
BELOW: Salerno Maritime Terminal

us every day, and we work on as Zaha taught us – with curiosity, integrity, passion and determination.

"With 36 projects in 21 countries under construction or in detailed design development, everyone at Zaha Hadid Architects is committed to continuing this progress."

This year alone, four projects have reached or will reach completion.

Salerno Maritime Terminal, Italy

This new terminal has been designed to enable regional, national and international ferries as well as cruise ships from around the world to dock in Salerno for their passengers to visit the Amalfi coast.

Port House, Antwerp

Europe's second largest shipping port, the new Port House preserves and repurposes an abandoned 95-year-old fire station into a new headquarters.

King Abdullah Petroleum Studies and Research Center (KAPSARC), Riyadh

KAPSARC is a non-profit institution that researches and tackles energy challenges. Built with sustainable construction methods and materials to LEED Platinum certification, the new centre has been designed to work with its natural environment to ensure comfort for employees alongside minimising energy consumption.

Mathematics Gallery, Science Museum, London

A pioneering new gallery that explores how mathematicians, their tools and ideas have helped to shape the modern world. The gallery's design is defined by mathematical equations that determine the three-dimensional curved surfaces representing the patterns of airflow that would have streamed around an historic 1929 aircraft at the centre of the exhibition. ■



The Foundation in Hardware

“

“Completing the course has certainly increased my confidence with architectural hardware products. I now have a better understanding of certain terms and details on each product group covered by the course, which will definitely help me going forward”

Häfele UK, Internal Technical
Sales employee

**Do you work in
sales, customer service,
trade counter and
other support roles in:**

- Locksmiths
- Builders' Merchants
- DIY stores
- Architectural Ironmongers
- Interior Designers
- Contractors

**The GAI Foundation
in Hardware module
is the first step on
the prestigious GAI
education programme.**

- Learn at your own pace –
at home or at work
- Self test your knowledge
- Repeat the final test as many
times as necessary
- Print your certificate of
competence

**Try before
you buy!**

Free taster at
thebuildingacademy.com/GAI



DO YOU CHECK THE SCOPE OF APPROVAL?

It is important to be aware that a fire door needs compliant door hardware and ironmongery to maintain fire safety integrity.

By checking manufacturers' 3rd party test certificates for 'scope of approval' you can ensure all components are compatible with the specification of the door. For example, is it certified on both latched and unlatched doors?

A product's suitability for door types and the installation variants is critical when lives and property could potentially be at risk.

DORMA. The Access

DORMA UK
Wilbury Way
Hitchin
Herts
SG4 0AB
01462 477600



info@dorma-uk.co.uk
www.dorma.com