# architectural ironmongery journal

no.125 spring 2007

advancing architectural ironmongery

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Strong finish to 2006 Business News New Products

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# THE DOOR CLOSER IS HIDDEN, THE ADVANTAGES ARE CLEAR





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## advancing architectural ironmongery

n a glorious spring afternoon at Lord's the Al industry gathered together to celebrate the very best architectural ironmongery schemes in the UK in the past year at the GAI Specification Awards.

The single principle which united all of the winners and commended schemes was the quality of the partnerships between architect, architectural ironmonger and the manufacturer. Each was committed to achieving not just a superb-looking, effective scheme, but also one, which would withstand the tests of time, as well as meeting budget requirements. The emphasis was not on cutting corners or costs but on achiev-

aijfeatures

Gary Turner, Bronze winner

ing a system to please the eye, the user, and the setting as well as the pocket. The projects outlined in our Specification Awards supplement shows just what it is possible to achieve.

Quality is also a principle which unites the two subjects of this issue's AI profiles - both of whom are from the Emerald Isle. The Irish economy - so often branded the Celtic Tiger - has been a mixed bag of recent years. While the housing market in Northern Ireland has boomed since the end of the Troubles, the tiger's roar in the Republic has been somewhat muted recently. While the general trend is still positive, the latest guarterly economic commentary from The Economic and Social Research Institute (ESRI) economic

growth in 2008 is forecast to fall to its lowest rate since 1993. Our AI profiles aim to show how two successful AIs are doing business in these conditions.



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### aijfront cover



The Hanover Quay waterside development in Dublin where the Balmar Group supplied architectural ironmongery. Photograph kindly supplied by Dansk Window Systems Ltd who supplied and installed high specification Aluwood windows and doors to the and doors to th building

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Editorial Panel: Wayne Harris Guild Presiden Tel: 020 8980 8000 Email: wayne@harbrine.co.uk

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Jules Quested Williams Guild Communications Committee Chair:

Tel: 01543 443000



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Email jqw@geze.com

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# FIRST FOOTPRINT

"If the UK's house building aims are to be achieved by 2016, experts from across the construction industry must work together now to share experience, innovation and best practice and expand the collective knowledge essential in delivering the government's carbon saving objectives."

These were the stark words from Neil Schofield, Head of Sustainable Development at Worcester Bosch and Chairman of the Construction Products Association's Low and Zero Carbon Buildings Group which has been launched to investigate the realities of delivering zero carbon homes in the UK.

Bringing together more than 50 experts from across the industry, Schofield went on to say: 'This group has been formed to support the move to zero carbon buildings and a mass market zero carbon housing, which will only happen if the industry works in an integrated manner. With people from

all parts of the industry it is clear that there is not only interest but also a wealth of expertise that needs a focal point to allow the exchange of knowledge and experience. Successful delivery of 200,000 zero carbon homes a year from 2016 onwards will need integrated working and this group has a crucial role to play in achieving this'.

#### The main focus for the group is to investigate;

 Low and zero carbon heating, hot water technologies and generation of electricity

 Buildings that have low energy demands through high performing fabric and components

• Projects and products that have aimed for low or zero carbon operation

# OLYMPIC DELIVERY AUTHORITY, SUSTAINABLE DEVELOPMENT STRATEGY

The Construction Products Association has welcomed the principles of the ODA's Sustainable Development Strategy, but expressed concern that some important aspects will not deliver the sustainability objectives that all those involved hoped to see achieved.

Speaking after the launch, Michael Ankers, Chief Executive of the Association said; "We strongly support the principles behind this Strategy, especially the focus on the environmental and socially responsible sourcing of construction materials; the target to minimise waste; and the importance attached to the sustainable transport of materials to the site.

"There are, however, some aspects of the Strategy that cause us concern. In particular, whilst the Association encourages the re-use and re-cycling of materials, setting a specific target measured by the value of the material will not necessarily deliver the sustainability objectives that are desired and will be extremely difficult to implement.

Looking to the future, Mr Ankers said, "This Strategy is key to delivering

the Legacy which is such an important part of the Olympics Project. The manufacturers and suppliers of construction products will be responsible for almost 50% of the value of the projects, and therefore have an important part to play in delivering the Strategy. We have been very encouraged by the willingness of the ODA and its Delivery Partner to engage with companies in our industry at an early stage in the process and we remain confident that this will ensure the objectives in this Strategy are delivered on the ground."

# STRONG FINISH TO 2006 RAISES EXPECTATIONS FOR COMING YEAR

The construction industry finished 2006 on a positive note and expectations are high for sustained growth during 2007, according to the latest joint Trade Survey Report from the Construction Products Association and the Construction Confederation. However, high fuel and energy prices continue to hamper the industry's overall performance, squeezing both product manufacturers' and contractors' margins and driving up tender prices.

The rise in output continues to be driven by robust commercial and industrial sector output combined with a modest rise in civil engineering work. Disappointingly though, the patchy delivery of key government programmes prevented even stronger industry growth during the final quarter of last year. Construction product manufacturers have enjoyed an overall rise in sales volumes, with growth continuing to be led by light side firms. Heavy side firms' sales have also improved, as companies are starting to benefit from an increase in civil engineering work.

Looking ahead, the industry is expecting a further strengthening in construction activity during 2007, marked by order growth and rising demand. A modest pick up in public sector investment is expected to contribute to the rise, but higher private sector activity, in particular a strong commercial sector, will again be the main engine for industry growth. In addition, the pick-up anticipated for heavy materials' demand is based on hopes of a recovery in infrastructure investment.

# THE GREEN CHANCELLOR?

Despite all the expectations that the Chancellor would deliver a budget to encourage environmental efficiency, the measures outlined today fall well short of what is needed to address the climate change issues and deliver a more sustainable future.

Speaking after the budget announcement, Michael Ankers, Chief Executive of the Construction Products Association said; "There is an urgent need to make existing buildings more energy efficient, but the Chancellor has missed a great opportunity to provide financial incentives to achieve this. Whilst plans to exempt new zero-carbon homes costing up to £500,000 from stamp duty are to be welcomed, these are very modest measures given the scale of what has to be achieved with the overwhelming majority of existing homes - new homes only account for 1% of total stock in any given year. An incremental improvement to the energy efficiency of existing homes of 1% each year would more than outweigh the environmental benefits produced by building all new housing to zero carbon.

"The Government must develop its strategy to make the existing building stock more energy efficient if it is serious about reducing carbon emissions and improving energy efficiency. There are a number of ways to help all householders improve energy efficiency, but this budget has done little to encourage any improvements. The financial grants to help pensioners insulate their homes may be good for their quality of life, but this is a social policy, when what is needed is a strategy to reduce emissions from all the existing housing stock.

Turning to the issues in the budget aimed at improving business competitiveness Michael Ankers said; "It is unlikely to deliver significant wins for UK Plc – despite the cut in Corporation Tax to 28%, but we welcome the measures in the Budget to assist industry competitiveness. We are pleased to see the Government remains committed to reducing red tape through simplification of the tax system and are particularly pleased that Corporation Tax has been cut, however the rises in taxation for smaller firms mean the overall fiscal burden on businesses has not been significantly reduced by this budget".

"The Government must develop its strategy to make the existing building stock more energy efficient if it is serious about reducing carbon emissions and improving energy efficiency"

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## **ROTO FRANK ON THE WEB**



Leading hardware manufacturer, Roto Frank has launched a new website.

The new site is far more comprehensive than its predecessor and allows the visitor to 'drill down' to product information in a logical sequence within a particular area of interest. For example, a fabricator of PVC-U doors and windows will start within the material sub-section of PVC-U and from there be able to explore hardware sections relating to different product areas of doors, windows, etc. Similar areas are provided for timber, aluminium and composite materials.

For those visitors who already know which Roto products they require, the site also features a full product index that provides a direct quick-link to the desired product and downloads section for quick and easy access to product and company literature.

Product information is presented as a brief overview, from which the visitor can then choose to download product summary data sheets or full product specification literature in Adobe Acrobat PDF format.

In addition to product information, the site features specification advice, technical support information and distributor contact details.



### **NEW GUIDE TELLS ALL**

A 'Specification Solutions' guide that addresses all the common problems associated with window hardware specification, has been launched by Securistyle in light of the introduction of new European legislation and the impact on current British Standards.

Free to specifiers and architects in the commercial, new build and social housing sectors, the six-page guide, highlights the most cost effective ways to draw up a good window specification. It focuses on what specifiers should consider when selecting a safe, secure window that is going to perform well in the long-term and that meets all legislative requirements.

## **NEW WOMAN AT MANN**



Mann McGowan has appointed Lindsey Hulin as Group Sales and Marketing Manager. The company specialises in the manufacture and installation of passive fire protection and acoustic products. Lindsey has several years Sales and Marketing experience at management and Director Level, and will be responsible for all UK commercial activities.

# LORIENT SEALS THE DEAL



Lorient Polyproducts Ltd, the acoustic, smoke and fire containment systems specialist, has launched a brand new, comprehensive website - www.lorientuk.com.

The new website offers an inviting, user-friendly homepage that allows visitors to easily navigate through the company's extensive range of products and services. Lorient's entire collection of brochures is available to download from relevant product pages - as are copies of certification, specification text and CAD drawings.

A host of new features has been introduced to the site, including Market Sector Solutions, enabling visitors to quickly find the best Lorient sealing systems for typical applications, as well as providing guidance on the standards and regulations relevant to each specific application. Comprehensive technical information is also included about the company's products, supplemented by a detailed FAQ area. Another new feature includes the Personal Product List - this allows product information to be stored in a personalised file, for quick and easy reference in the future, or for e-mailing to Lorient for further information.

# **NORMBAU** Nylon Hardware

# Combining easier access, reduced cross-infection and stylish appeal



Normbau coloured nylon hardware offers a wide pallet of colour combinations to enable you to achieve the 20 or more LRV (Light Reflectance Value) recommended by BS8300. Providing a visual contrast between the hardware and its surroundings facilitates access, particularly for the visually impaired.



A unique textured surface available on Normbau bathroom furniture provides improved grip for all users, whilst the nylon material is 'not cold to the touch' in line with BS8300 guidance.



Ingersoll Rand is the only manufacturer to build long-lasting and effective antibacterial protection into their hardware. As Microban<sup>®</sup> is incorporated within the polymer structure of the nylon it cannot be worn away. This reduces the cross-infection risk of HAI (Hospital Acquired Infections), such as MRSA.

Normbau Combi incorporates all the benefits of nylon combined with the aesthetics of stainless steel to provide an alternative style to a full nylon specification.





# **INVESTING IN ENGINEERS**

GEZE UK's operations director Paul Ryan has called on the industry to take into account the importance of training in the light of the increasing need for compliance. As the need for accountability in the building and construction industries increases and with the quest for continuous improvement and innovation, sub contractors have a major role to play in providing skilled workers and raising industry standards. Meeting these specific needs has been a chief focus for the Automatic Door Suppliers Association (ADSA), which has invested in developing specific qualifications to set a high benchmark to improve quality and expertise.

The AI industry already makes a significant investment in new product development but less attention has traditionally been paid to the knowledge and skills of site engineers. GEZE is an active member of ADSA, and is supporting the creation of strict qualification criteria for a specific NVQ Level 2 in automatic door installation.

The NVQ has been designed to test and demonstrate the varied skills of engineers working in this specific field including glazing, communication, mechanical engineering, electrical work and even diplomacy. In truth, the knowledge required to specify and install automatic doors makes the job one of the most complex and diverse in the construction industry. As technology advances, the potential uses and applications of automatic doors are expanding quickly. GEZE is proving this commitment by funding all its engineers through this difficult and challenging qualification, guaranteeing the highest level of service and expertise at the point of delivery.

"Investing in staff is the best way to ensure the future of our industry, arming engineers with the tools they need to innovate and push the boundaries in automatic door installation," comments Paul.

# DHF DATE

A date for your diary - the Door & Hardware Federation (DHF) is holding its annual Conference and Expo for the door, shutter and hardware industry on Friday, September 28 in Loughborough. Its organisers say the event will showcase best practice in the sector and they expect good visitor numbers throughout the day.

Visitors will be able to visit a variety of trade stands in the conference area at Loughborough University's Sir Denis Rooke Building, Holywell Park. They will also be able to attend specialist free workshops which cover a wide variety of hot topics, including the latest legislation which is impacting on the industry.

The DHF's 2007 Conference and Expo is open to members and non members alike. It is planned to be even larger than last year's successful event. Said DHF chief executive lan Wood: "The expansion of the event, and opening it out to non members, reflects the increasing importance of the metal door and hardware industries within the construction sector."

## COOKE BOOKS

Cooke Brothers Ltd has published its new 'Phoenix Architectural Hinges Product Selection Guide'.

Following on from the successful launch of the new comprehensive suite of '7 different hinge ranges for 2007', this new guide is targeted at Architects, Specifiers, and end-users alike to aid in the correct specification of Phoenix hinges to ensure the most suitable product is used for each application.

The twenty page brochure consists of three sections; the introductory pages, which cover the seven steps to be followed to specify the correct hinges for a particular application, as well as explaining the different bearing technology used within the Phoenix hinge ranges. The central pages covering the Phoenix ranges in more detail, together with a double page selection chart, and the final section covering the more technical aspects that need to be considered and the standards that need to be complied with.

## **21ST CENTURY TIMBER WINDOWS**

As part of its drive to promote the sustainability credentials of timber windows, the British Woodworking Federation (BWF) and the TWA (Timber Window Accreditation) Scheme are hosting '21st Century Timber Windows', a one-day conference to be held at the iconic LSO St Luke's Hall in London on Wednesday 16 May. With a programme designed for architects, specifiers and contractors, the conference will be chaired by Ruth Slavid, editor of AJ Specification. The focus of the conference programme is to highlight the sustainability credentials of timber windows in the context of government initiatives such as the Code for Sustainable Homes and changes to Part L of the Building Regulations. The line-up of speakers will include a leading architect, research experts from BRE and representatives of the public and private sectors. And the conference will provide a stage for the unveiling of brand new life cycle assessment studies. Richard Lambert, chief executive of the BWF says: "This is going to be a high profile event, bringing together all the powerful evidence we have compiled to demonstrate that timber windows are the best environmental choice and why".



## aijguild matters



# OUR FRIENDS IN THE NORTH

The GAI has unveiled its plans for its annual conference in June of this year. The four day event marks the culmination of a busy year for the GAI which has seen, amongst other initiatives, the launch of its new identity.

The conference, which will take place over four days from Thursday 31 May to Sunday 3 June at the Slaley Hall Hotel in Northumberland, is the key gathering in the architectural ironmongery sector calendar, bringing together all of the industry's key movers and shakers from both the manufacturing and distribution sides of the business.

"The Guild of Architectural Ironmongers is the voice of the industry - the only body which truly speaks for the whole trade - manufacturer and distributors, individuals and companies," comments Peter Spill, the Guild's Director. "Our conference is an excellent opportunity for members to hear about the latest developments in the industry from a programme of keynote speakers and meet colleagues, customers and friends old and new in a relaxed setting."

The Guild's AGM forms the first part of proceedings, followed by a packed programme of speakers and networking opportunities. This year's Conference theme will be Customer Service with speakers exploring the issues surrounding this subject and how it affects the architectural ironmongery trade. An inspirational keynote speaker will round off proceedings on Saturday.

# Clearly Architectural Hardware for Glass Doors









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## aij**technical**

# Changes for domestic door closers

Jacky Sinclair DipGAI, FInstAI, Registered Architectural Ironmonger

The new Approved Document B 2006 edition is now available to purchase or download from the DCLG website:

# www.planningportal.gov.uk/england/professionals/en/11 15314110382.html

The new regulations which came into force on 6 April this year. Jacky Sinclair, the GAI's Technical Consultant, looks at the changes which may affect ironmongery specifications from that date.

The first change you will notice is that the document is split into two volumes:

#### Volume 1 - Dwelling houses

#### Volume 2 - Buildings other than dwelling houses.

The definition of "dwelling house" becomes important, so that you know which Volume to refer to when looking for guidance. It is quoted here in full:

"Dwelling house": A unit of residential accommodation occupied (whether or not as a sole or main residence):

a. by a single person or by people living together as a family b. by not more than six residents living together as a single household, including a household where care is provided for residents

Dwelling house does not include a flat or a building containing a flat."

This last statement means that requirements for flats - and any other sort of residential accommodation which is not a "dwelling house" - are covered in Volume 2.

### **Requirements for door closers**

There have been major changes here for both dwelling houses and flats.

 In dwelling houses, internal fire doors will no longer need door closers except on doors connecting the house directly to a garage (attached or integral)

 In flats, internal fire doors will no longer need door closers but the flat entrance door must have one

• Rising butt hinges are no longer accepted as a door closing device except in cavity barriers (i.e. not acceptable on doors to rooms or in corridors)

• Self-closing devices are defined as "a device which is capable of closing the door from any angle and against any latch fitted to the door." This implies a controlled door closing device of the type covered by BS EN 1154.

### Implications

There will still be fire doors in houses and flats, and these doors will still need CE marked hinges, locks and latches, and fire tested door furniture. But it is now the responsibility of the occupants to keep the internal fire doors closed. The change affects buildings where planning permission is applied for AFTER 6 April this year. It will be interesting to see if Building Control personnel insist on maintaining the status quo until all affected buildings granted planning permission before 6 April are finished and handed over.

This has significant financial implications for those ironmongers who have specialised in housing work. Supplying a more controlled and expensive closer for integral garage doors and flat entrances is

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unlikely to offer much of a quid pro quo.

### Other items of interest

The rest rather pales into insignificance in comparison with the previous news, but it is still worth recording.

• Locks and child-resistant safety stays may be provided on escape windows. This was not allowed before.

• Certification schemes for products and installation are mentioned as a means of showing compliance with standards, though Building Control must decide whether the certification is appropriate.

• Appendix B: Fire doors - now draws attention to the fact that ALL components making up the fire doorset should have fire test evidence which is applicable to the complete installed assembly. This will be

"As regulations and standards become more detailed and specific, it is vital that companies keep up to date. There are now penalties for supplying incorrect products. Qualified staff who undertake Continuous Professional Development are an asset that should not be under-rated."

welcomed by those whose efforts to offer the right products have been undermined by some suppliers and contractors with cavalier attitudes to fire testing of door hardware.

• Appendix B: Fire doors - references our "Code of Practice: Hardware for fire and escape doors". Unfortunately, the title isn't quite right, and the publishing organisation cited is wrong, but we know what they meant. The title and publisher will be amended at the earliest opportunity. Those who have not yet downloaded a free PDF copy from the GAI web site, or saved the "browse on-line" edition as a favourite, should consider doing so immediately. There's no excuse now for not knowing what's in the document.

• Appendix G: Fire safety information - this is a new appendix which reflects the requirements of a new Building Regulation, numbered 16B. This requires that fire safety information be made available to assist the "Responsible Person" under the RRO to operate and maintain the building with reasonable safety. This is an opportunity for manufacturers and suppliers to demonstrate their savvy by offering maintenance information on all products which contribute to the safe operation of fire, smoke and escape doors.

### **CE marking for bathroom locks**

Although this is not directly concerned with the new AD B, it is an opportune moment to share the news that it is now possible to CE mark bathroom locks. This is important for situations such as bathroom doors in townhouses which open directly onto a stairway, or toilet doors in clinics or surgeries which open onto escape corridors. Previously, BS EN 12209 excluded locks with a bathroom function from being CE marked, and therefore being used on fire doors. This anomaly has now been rectified, and you can expect to see CE marked bathroom locks coming onto the market.

### Keeping up to date

As regulations and standards become more detailed and specific, it is vital that companies keep up to date. There are now penalties for supplying incorrect products. Qualified staff who undertake Continuous Professional Development are an asset that should not be under-rated.

# RECORD YEAR FOR EDUCATION PROGRAMME

This year will be one of consolidation for the education programme building on excellent results last year. And what a flying start it has got off to with a record number of candidates registering for the Level One exam. A grand total of 400 students will be embarking on the course, armed with some newly written and redesigned manuals to help them along.

Next year will see a significant shift in the way



that students access the courses with the introduction of open, on-line learning. Keith Maer and the Education Committee have plans for the new scheme well underway with a launch timed to coincide with a complete overhaul of the GAI web site.

## **TECHNICAL UPDATES**

The new year has seen a busy start for the GAI's Technical Committee with a number of important developments to keep abreast of

• Doc E: the Technical Committee produced a wellreceived Technical Update on changes to Approved Document E, which have created a new responsibility for the specifier regarding the acoustic performance requirements for door assemblies in certain situations. Copies of the Tech Update are available to download at ww.gai.org.uk

• Part B: changes to part B of the Building Regs come into force in April which remove the need for self-closing devices on fire resisting doors within dwellings. This will obviously have commercial as well as technical implications for many GAI members and the committee is currently working on producing a Technical Update which will give an in-depth briefing on the full implications

• RRO: this is now fully operational and the joint Code of Practice issued alongside the Door & Hardware Federation has been justifiably popular. Again, it can be downloaded via the GAI website

## aijletters

Please send correspondence to: Helen Curry Editor aij

The Guild of Architectural Ironmongers 8 Stepney Green, London E1 3JU Tel: **01268 692195** 

Email: editor@aijournal.org

### Dear Madam

Graham Hulland's article (AIJ 124, page 22) "Closing in on Fire Doors" whilst discussing Hold Open Door Closing Devices and Swing Free Door Closing Devices states incorrectly "However, as they provide no opening resistance they will automatically meet the requirements of AD M and BS8300." Surely if the fire alarm has sounded and these devices have closed the fire doors (and the closers will then have opening resistance?) people, including those with disabilities, will still require to pass through them and therefore the closers etc should continue to meet the requirements of AD M and BS8300?

Do all closers at all times have to meet the requirements of AD M and BS8300 since even during a fire your rescuer/s may have disabilities?

### Edward Walker Architect Leeds

Ian Stewart, Chairman, GAI Technical Committee responds:

Thank you for your thought-provoking question. We hope the following information will clarify the situation.

You are quite correct to state that doors held open or allowed to swing free through electro-magnetic devices will resume their self-closing function when the fire alarm is activated. In turn, this might well render previously "accessible" doors unusable by some people with disabilities.

This situation is covered by both the Disability Discrimination Act and the more recent Regulatory Reform (Fire Safety) Order. Both pieces of legislation make clear that Management (in the case of employees) and Service Providers (in the case of other buildings) have a duty of care to ensure that provision is made for people – including those with disabilities - to escape to a safe place in case of fire.

How this is achieved will be decided on a building-by-building basis, and after hazard analysis and risk assessment. It should be covered in a building's Access Statement, and also in the documented procedures generated by the Responsible Person under the RRO.

Mr Hulland was correct in stating that such electro-magnetic devices meet the requirements of both AD M and BS 8300. The requirements here are for access under normal circumstances. Other legislation and regulations cover requirements for safe evacuation in a fire emergency.

### Dear Madam

I was very disappointed in the response of Jacky Sinclair re digi-locks in healthcare premises. (Issue 124 P25)

Healthcare premises have a very high fire separation and compartmentation standard to protect patients for the longest possible period. Most doors even to private offices are therefore fire doors of 30 or even 60 minutes rating.

This widespread practise by your members and other construction trade staff adversely affects the fire performance of the door. Most (unproven) digital locks require a large core hole and



the lock is low melting point alloy. Therefore, during a fire these allow the fire to spread sooner than the designer planned.

Again on the second question you fail to ask if the escape route door in question is a fire separation door. Doors to stairwells and lobbies are usually fire doors and therefore the same problem as above occurs.

Please spread this important information and possibly prevent one of your professional members from a prosecution as an incompetent contractor.

### Michael Floyd, Senior Training & Technical Consultant, Fire Protection Association

#### Jacky Sinclair responds:

I completely agree that many digital locks – and other items – are fitted to fire doors without the necessary fire test evidence being called for. Much of this seems to be retrofit, though I can't say all ironmongers are innocent in their specification work. However, the majority take a very responsible attitude to ensuring that their staff are Dip.GAI qualified, if not Registered Architectural Ironmongers. The latter would certainly want full assurance that any product they specified for a fire door had been appropriately tested, with documentary evidence to back up any claims.

In the GAI's training courses, great emphasis is placed on ensuring only suitable fire- and performance-tested products are specified. The GAI also publishes a Code of Practice: Hardware for Fire and Escape Doors, which further emphasises the points you made. This can be accessed at www.gai.org.uk/cop.

With regard to the answers in AIJ, the questions and answers were not intended to be a complete treatise on the use of digital and access control locks, but just an insight into some of the questions that come across my desk from qualified architectural ironmongers who are trying to make sure that they comply with all the legislation relevant to a project. It was hoped that the responses would help other qualified professionals in our industry.

The question on digital locks was specifically about their use on accessible routes, so that was the focus of the answer. It was taken as a given that fire aspects would already have been addressed by the questioner.

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# SPECIFICATION AWARDS ANNOUNCED

The GAI has announced the winners of its 2006/07 Architectural Ironmongers Specification Awards. Sponsored by the GAI in conjunction with the Royal Institute of British Architects (RIBA), the awards are designed to identify and reward excellence in the specification of architectural ironmongery in five categories - Commercial, Established Buildings, Public Buildings, Renovations and Residential - with over fifty buildings nominated this year.

Presentation of the Awards took place at Lord's Cricket Ground, in London on 26 March 2007 in the splendour of the historic Long Room. Looking down from the walls were some of the greats of the cricketing world over the centuries as the winners received their prizes from Keith Snook, Director of Business Development at the RIBA.

The winners are described in-depth in our special Specification Awards supplement, each one demonstrating the importance of the architectural ironmonger and architect working closely together to achieve excellence in design and functionality.





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cheaper, imported products continues so it is vital that we can offer our customers added value and top-rate service in order to stay competitive."

This ethos is obviously working since Häfele continues to grow and prosper with branches in London, Bristol, Manchester, Leeds, Scotland and Wales in addition to the head office and main distribution centre in Rugby in Warwickshire. Head office covers a 6 acre site which holds the 4 storey office block and an automated high rise warehouse.

The company is part of an international group of 37 networked companies across five continents with 3,400 employees. Originally established in 1923 in Nagold, Germany, as a local specialist hardware business by the Häfele and Thierer families, the Häfele group of companies is now managed by the third generation of family members.

Gary enjoyed the level three studies although he admits that combining work and study can be a challenge. This is where Häfele's training 'champion' Alan Kemp came into his own, setting homework, giving feedback, offering support and

AGE

f there are records for such things, then Gary Turner, this year's Bronze medal winner could go down in history as the fastest Diploma holder in GAI history, gaining his Dip GAI qualification just three and half years after entering the industry.

Gary joined Al distributor Häfele in March 2004 and is honest enough to admit that, before then, he had never really heard of architectural ironmongery and had only the sketchiest idea of what the industry was about. While he was aware that Häfele sold furniture fittings through friends who worked at the company, he was unaware of the extent of its involvement in the sliding and folding door gear in which the company is the market leader.

"I had been working for about sixteen years in the steel stock holding industry in the Midlands," explains Gary. "I had held a variety of sales and marketing roles but, to be honest, the whole of that industry was in decline and after having a couple of experiences of redundancy and companies going under, I looked around for a new challenge."

That challenge came in the shape of Häfele. Since opening its first British ware-

house in 1980, Häfele UK has become one of the largest furniture fittings and architectural ironmongery distributors and the company invests heavily in educating its staff, putting on internal training courses and tuition through the offices of Product Development Manager Alan Kemp.

Gary joined Häfele's Technical Sales Office and started learning on the job straight away, concentrating on his main functions of producing quotes and answering technical queries on sliding and folding door gear. The rest of his time is taken up with dealing with enquiries and questions on architectural ironmongery from existing customers, members of the public, contractors and architects.

The company has a strict policy of all of its architectural ironmongers completing the GAI education process and achieving Reg AI status. And Gary embarked on the journey through the GAI's education process just a few months after joining. The company sets great store by the Guild's education process, seeing it as one of the key ways in which to differentiate itself as a quality company, offering quality products and quality service.

"We are all operating in very competitive markets," he comments. "The pressure from

keeping the students motivated. "I don't think I would have succeeded like I did without Alan's support," comments Gary. "He is a clear demonstration of Häfele's commitment to training and his input made all the difference."

Gary's reaction to his exam success was one of shock and relief. Confident that he had passed the scheduling element of the exam, he did have some reservations about his performance in the business elements of the exam. The bronze medal was a definite surprise and a bonus and one which was recognised with enthusiasm at Häfele – not least by Alan Kemp.

Becoming a Dip GAI is a help to Gary on a daily basis – not least because it has given him new confidence. "No matter what query we get, there is always someone here who can answer. But what the GAI education has given me is confidence that I can answer, out of my own head, the vast majority of the queries that come in. That gives me a genuine sense of satisfaction."

Gary is keen to encourage colleagues embarking on Level One study at Häfele. "It can be tough to study and work simultaneously but the hard work and effort really does pay off."

# GOVERNMENT LISTENING ON CLIMATE ISSUES

The RIBA's emphasis on climate change appears to have paid dividends and a long-term campaign for the reform of the planning system and better building design has had a direct impact on ministerial thinking.

Chancellor Gordon Brown has embraced the notion of carbon-free housing, while Kate Barker, commissioned by the government to compile a study on the planning system has closely reflected the Institute's concerns in her report.

President Jack Pringle has long championed radical ideas to tackle climate change through a package of incentives, regulation and taxation. 'The government is showing a clear lead on tackling climate change through building design and has answered the calls we made in our Manifesto for Architecture for stamp duty relief on sustainable homes and low energy schools,' said Pringle. 'The challenge is now on the design and construction industries to deliver. We will continue to work with the government and other partners to reduce carbon emissions from buildings.'

The Institute's head of public affairs, Steven Harding, said there was still a considerable amount of work to be done. The RIBA is currently concentrating on providing assistance and advice to the government as it prepares to publish a planning White Paper now that it has responded to the government's Building a Greener Future consultation document.

"There is still a lot more for the government to do, but then there's lots more for the profession to do,' said Harding. 'The role for the RIBA is not only ensuring our members have the necessary skills to deliver, but also to help ensure the planning and regulatory system is sufficiently flexible and future proofed to help make it all happen.'

Harding added that the political argument over the role of design and construction of new buildings in addressing climate change had 'been won' but the Institute remained anxious that the government starts considering how to make existing buildings less energy - hungry. This could be done, said Harding, through a mixture of tax incentives and grants to encourage the adoption of a wide range of energy - saving measures.

'Nobody is talking about making all existing buildings zero - carbon, but there are all sorts of measures that could encourage home-owners or businesses to undertake the necessary work to reduce their carbon dependency,' said Harding.

The government's Code for Sustainable Homes, as well as comments by the Chancellor, commits the UK to developing a generation of zero-carbon new homes within a decade. This ambitious target met with an enthusiastic response from the RIBA: 'Taking new homes to zero carbon within 10 years is an ambitious but necessary government target, and the Code for Sustainable Homes will be fundamental to meeting it,' said Pringle. 'I hope to see further steps by the government to tackle the energy performance of existing building stock.'

A common theme across the latest government announcements (as well as in the Barker Review) is that the planning system should undergo a considerable revision and cease to be a 'one-size-fits-all' regime. Central to the proposals is the idea that smaller, less contentious schemes like extensions and loft conversions should be exempted from planning guidance, allowing planning officers more time to consider larger and more sensitive proposals. Equally, the proposals open the door to more formal pre - planning application dialogue between architects and planners, as well as the advent of 'design champions', better training for planning committee members and design codes which provide a framework within which the entire design and planning community can operate.

The Barker Review of Land Use Planning and the Code for Sustainable Homes can be seen in full at www.communities.gov.uk.

### RIBA Trust launches exhibition programme

RIBA Trust has organised a series of exhibitions which are set to run throughout the spring and into the summer. They are due to cover subjects from the design of education buildings and the refurbishment of the Royal Festival Hall, to visions of the future and an exploration of slum living.

Later in the spring, the RIBA and V&A are due to celebrate the reopening of the Royal Festival Hall, built in 1951 and recently refurbished and remodelled by Allies & Morrison. Timed to coordinate with the official reopening in early June, the exhibition illustrates how the original architecture and new work have been designed to complement each other. This exhibition will run from 21 June to 14 October at the V&A+RIBA Architecture Exhibition Gallery at the V&A Museum.

### researchawards

The winners of the inaugural **RIBA President's Research Awards** have been announced. Dr Rajat Gupta of Oxford Brookes University won the award for outstanding PhD: 'Investigating the potential for local carbon dioxide reductions: developing a geographic information system-based domestic energy, carbon counting and carbon reduction model'.

Dr Wendy Pullan of Cambridge University won the award for **Outstanding University-led Research** with her work 'Conflict in cities: architecture and urban order in divided Jerusalem'. The research concerns urban development in Jerusalem, exploring in particular the security wall that crosses the countryside in the region and the main road that runs towards Damascus Gate.

**Shortlisted for Outstanding PhD** were: Dr Yeoryia Manolopoulou of the Bartlett School of Architecture; Dr Torwong Chenvidyakam of Cambridge University; and Dr Alan Owen Williams of Sheffield University.

Shortlisted entries for **Outstanding University-led Research** included: Professor Peter Blundell Jones of Sheffield University.

### **BEX 2007**

This year's Building Exchange event, BEX, takes place in Valencia from 18-20 June. Hosted at the city's new Hilton Hotel, the event aims to bring together representatives from the whole construction industry supply chain. Cities and districts already signed up for the event include Belgrade, Valencia, Malmo, Cork City, Dublin Airport and the Elephant and Castle Regeneration Project. The conference programme will hear from Steve McGuckin of Land Securities and Liz Pearce of the British Property Federation. For further details visit www.b-e-x.com or call 020 7403 2773.

# CE Marking of Building Hardware -Guidance Notes

here seems to be a great deal of confusion in the marketplace about CE marking and what is or isn't required. Many customers are disputing the advice given by their ironmonger as other suppliers have given them contradictory advice. Consequently the ironmonger begins to doubt his/her own understanding and is reluctant to continue to give the same advice. This confusion is very damaging for our industry as it opens the door for less scrupulous traders to get their products out in the field. Therefore this guidance is an attempt to clear up the confusion so that we ironmongers can advise our customers correctly, ensuring that the correct products are used as appropriate.

As the UK is part of the European Union (EU) then we must comply with the Construction Products Directive (CPD) through the Construction Products Regulations 1991 (CPR).

The CPR means that the CPD is incorporated in UK law. Therefore by law we must comply with the requirements of CPR. The CPR gives details of the Essential Requirements a construction product must comply with. These Essential Requirements are Mechanical Resistance and Stability, Safety in the case of Fire, Hygiene, Health and the Environment, Safety in Use, Protection against Noise, and Energy Consumption and Heat Retention. These Essential Requirements are there to ensure that lives or health are not at risk if the product fails to work/perform as it should.

Comité Européen de Normalisation, (CEN), or the European Committee for Standardisation, is the central body set up to write the individual product performance standards. This central body has set up many Technical Committees that are made up of industry representatives from almost all European countries.

Each individual product standard is known as a Euro Norm (EN). Some of these standards have been designated by the European Commission as 'Harmonised'. These standards include the necessary sections to permit the products to be CE marked. In building hardware product standards the essential requirements are Safety in Use, and Safety in the case of Fire. They apply to the specific items being placed on the market for use on Fire/Smoke Compartmentation Doors and in some cases Fire Escape Route Doors.

In each product standard Annex Z details the clauses within the European Standard addressing the provisions of the EU Construction Products Directive 89/106/EE, the procedure for the conformity and CE Marking and labelling for that particular product.

Annex Z of the product standard also gives details of how compliance is to be proved. For all building hardware products this involves initial type testing, factory production control, and a third party certification body to approve the testing and control. This is called Level 1 Attestation of Conformity - other types of products may only require a lower level of conformity that involves only a manufacturer's declaration. In some cases on-going audit testing of the product is also required, again to be approved by a third party certification body.

The testing and certification can only be carried out by a Notified Body, these include testing laboratories, inspection bodies and certification bodies approved by the member state.

So put simply if a Harmonised Product Standard exists to cover a particular product, it is to be sold in the EU, and is to be fitted to a fire/smoke or fire escape door, then it should fully comply with the individual product standard. For Building Hardware Product Standards to fully comply it is necessary to have 3rd party initial type test evidence, fire test evidence, and be able to provide evidence of an approved factory production control system all covered by a notified body.

In many countries of the EU it is a requirement to go one step further and add the CE mark. The CE mark only acts as conclusive proof that the product complies fully with the appropriate product standard. In the UK and certain other EU member states it is not mandatory to CE mark construction products, but this seems to be where all the confusion begins. Whilst many construction products

"...to avoid falling foul of these regulations, it is always best to use CE marked products on all fire/smoke and escape route doors as appropriate. It is very difficult and complicated to use non-CE marked products and provide all the appropriate evidence to prove compliance with the CPR."

don't have to have the CE mark they must still fully comply with the appropriate product standard. That means it should still be possible to provide evidence of approved initial type testing, on-going audit type testing, a factory production control system and on-going audits of the factory production control, all covered by a certification body. Obviously it does make life much simpler if a product is CE marked, and then all that is needed is the Certificate of Conformity and the Declaration of Conformity. The notified body will provide a Certificate of Conformity to the manufacturer or the responsible importer and they, in turn will provide their own Declaration of Conformity.

Each product standard does not make any distinction as to where the fire/smoke doors or fire escape doors are to be fitted. The same rules apply to dwellings as to public buildings, for example.

The best advice one can offer is that where CE marked products are available, then use them. Ensure that copies of the supporting certificates and declarations are on record in case of any future enquiry. Remember that Trading Standards are policing this so it is best to make sure all supporting evidence is kept on file.

If a product is not CE marked but could be, then evidence of

initial type testing, factory production control, and approval from a notified body that the evidence is approved. A full list of notified bodies is available on www.europa.eu.int however take care to ensure the notified body is notified for the particular product as each tends to specialise in certain product ranges and is licensed accordingly. This could be a rather tricky exercise as documents may not necessarily be clear to understand.

Unfortunately, however, one must also be vigilant with CE certification to ensure it is legitimate. If one is in any doubt the notified body concerned should be checked on the Europa web site and then contacted regarding the concern.

## Building hardware product standards where CE marking is now possible are as follows:

EN12209	Mechanically operated locks, latches and locking plates when used on fire/smoke doors
EN1935	Single Axis Hinges when used on
	fire/smoke and escape route doors
EN1154	Controlled Door Closing Devices when
	used on fire/smoke doors
EN1155	Electrically powered hold open devices for
	swing doors when used on fire/smoke doors
EN1158	Door Coordinator devices when used on
	fire/smoke doors
EN1125	Panic Exit Devices operated by a horizontal bar
	when used on escape route doors
EN179	Emergency Exit Devices when used on
	escape route doors

Product standards where CE marking will be possible some time in the future:

prEN14846	Electromechanically operated locks and
	striking plates
WI 33/250	Multi-point locks and their locking plates

	•		
prEN12650	Powered	Pedestrian	Doors

WI 33/290 Uncontrolled Door Closing Devices (spring closers)

prEN	13633	Electrically	controlled	panic exit	system	S
prEN	13637	Electrically	controlled	emergency	y exit sy	ystems

Further confusion comes when considering those products that do not come under the remit of any of the above standards, or where the standard covering them has not yet been finalised. For example, jamb fixed spring concealed uncontrolled door closers, single action spring hinges, and rising butt hinges to name just a few. Take single action spring hinges, for example, these cannot be tested to EN1935, and as they are not a controlled door closing device they can't be tested to EN1154 either. They do fall into the uncontrolled door closing devices category, but as this standard has not yet been finalised, they cannot be tested to that draft standard either. Technically, therefore these items can be fitted to a fire door without contravening the CPR. However the specifier must be confident that those products which cannot be tested to an EN product standard are actually fit for purpose, ie the item has been proven in a fire test to the appropriate duration, be durable and actually be able to fully close the door from any angle. Rising butt hinges give the greatest problems and cause for alarm.

In many cases closing devices that rely on gravity or spring power to close the door are not usually powerful enough to perform as required and when inspected by the Fire Prevention Officer (FPO) and/or the Building Control Officer (BCO) they are rejected. Problems also arise when the springs have been tightened to such a degree that the door becomes a hazard as it closes with such force that a person could be injured if struck during the closing cycle. In the case of rising butts, the top edge of the door must be bevelled to facilitate closing, this means the fire integrity of the door is undermined.

Although the current Building Regulations Approved Document B still permits the use of rising butts on fire doors in certain residential situations, this must always be treated with caution. Remember that rising butts were originally designed only to lift a door over a floor covering when opening, and to close cubicle doors for aesthetic reasons, their self-closing ability was never intended to be used on fire doors.

If faced with the dilemma of whether to specify rising butt hinges the following questions must be answered satisfactorily;

1 Are the hinges strong enough to carry the mass of the intended fire door leaf

**2** Have the hinges been tested with the intended door leaf to the required number of cycles to prove durability for the proposed use,

**3** Have the hinges been tested in a fire test to EN1634-1 with the intended door leaf to the appropriate number of minutes,

**4** Will the door leaf, when fitted in-situ, close fully over the latch, into the frame from any angle of opening.

As a general rule, since it is very difficult to ensure all the criteria can be met, rising butts should not be fitted to fire resisting doors as a door closing device.

To conclude, and to avoid falling foul of these regulations, it is always best to use CE Marked products on all fire/smoke and escape route doors as appropriate. It is very difficult and complicated to use non-CE marked products and provide all the appropriate evidence to prove compliance with the CPR.

#### **Amanda Haley**

BSc (Hons), Dip GAI, M.Inst.Al works for Ian Firth Hardware Ltd.



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### UK ARCHITECTURAL HARDWARE COMPANIES SEE VALUES INCREASE

The challenge for any business leader is to increase the value of their business. This is the basis of a new study by industry analysts Plimsoll Publishing who have, for the first time, looked into the valuations of the UK's largest 50 Architectural Hardware companies.

The headline figures offer encouraging news. Overall values are on the up, rising 6% in the period of the review. Thirty one of the companies included have seen their values increase by a staggering 11%. This is a direct result of improved profitability and a conscious effort by their managers to place their companies on a firm financial footing. These companies are building a solid foundation to further enhance their values in 2007.

Sadly, not all of those valued in the study have prospered, as nineteen of the companies have seen their value fall, on average by -16%. One of the largest UK architectural hardware companies has seen their values plummet, falling by 50% in the review period.

To give some detail to the valuations, the 155-paged study includes a critical assessment of each of the 100 companies' strengths and weaknesses. David Pattison Senior Analyst at Plimsoll comments, "In the study we have taken a long term view and looked at each of these companies over the last 4 years. No wonder there is so much acquisition speculation in the market when the valuations change so rapidly from year to year."

Those looking to expand their businesses are sure to find the acquisition application of the analysis useful. David Pattison goes on, "There are five companies that really stand out in the analysis for their classic acquisition potential. Blatantly undervalued, they have the potential to double in value, if staff costs, debts and other expenses are brought under better control. These companies are likely to attract interest from private equity predators as well as industry buyers amongst the 50 largest companies."

The analysis offers some encouragement for all 50 companies by advising how they could increase in value. The strategies each should adopt to deliver maximum returns are laid out in the publication.

Copies of the publication are available by calling 01642 626400, visiting www.plimsoll.co.uk or by email from c.sherwood@plimsoll.co.uk.

## CONSTRUCTION GROWTH TO OUTSTRIP UK ECONOMY

Overall construction growth is set to outpace that of the UK economy over the next three years, according to the Construction Products Association. Although public sector work is finally picking up after two disappointing years, it is the private sector that is forecast to be the main driver for this growth, as it benefits from the strong office market and increased investment by both water and energy industries.

However, a cooling in the housing market is forecast to hold back new house building activity and limit the recovery in home improvement works over the coming year.

Speaking on behalf of the Association, Allan Wilén, Economics Director, said; "Overall the industry's prospects appear brighter than for





Krona pocket door systems are ideal where space saving and design flexibility are important. Sliding a kitchen, bedroom or bathroom door into a wall saves about 10 ft<sup>2</sup> of floorspace per door which can then be used more productively e.g. an extra cupboard or a bath instead of a shower. The Krona pocket door system is easy to install and comprises the latest sliding door technology utilizing high quality, robust components. Specifying pocket door options is easy. Any standard door blank can be used, maintaining a consistent aesthetic with other side hung doors. Single and double doors, simultaneous opening and frameless glass are all accommodated within the Krona portfolio. Accessories include hardwood timber door-jambs, plasterboard frame fillets for a minimalist look and the patented self-closing mechanism – Klose.

HI-LOAD Hinges KRONA Pocket Door Systems

SmoClo: Fire Door Safety Device some time. After two lean years, industry growth is expected to out pace that of the wider economy, even though growth in Government funded projects is likely to be more modest than that seen earlier in the decade due to the tight 2007 Comprehensive Spending Review expected later in the year.

Overall there is increased confidence that things are looking better and we forecast that construction industry growth will strengthen to 2.7% this year, supported by a sustained rise in new work and a modest recovery in repair and maintenance activity. A further strengthening in industry growth to 3.0% and 3.5% is forecast for 2008 and 2009 respectively."

## Other key points in the Association's forecasts are:

• Higher interest rates, greater consumer caution and a cooling in the general housing market are forecast to dampen private new housing and RM&I output during 2007 and 2008.

Public housing RM&I output is forecast

to recover over the next three years. However, progress is likely to be limited by the Government's waning enthusiasm for upgrading all social housing to its 'decent homes' standard by 2010.

• A sustained recovery in office development activity is forecast to underpin commercial sector growth over the next three years.

 Increased investment in regional distributional facilities is set to help lift industrial building work during 2007.

 After two years of sharp decline, a modest recovery in health related output is predicted over the forecast period led by a growth in PFI projects

• After four years of decline, the infrastructure sector is expected to mark a turning point this year as the forecast increase in investment by the water and energy industries will lead to a sustained recovery in overall sector output.

• The Highway Agency's investment programme for the strategic road network is expected to initially stabilise road construction activity during the coming year and subsequently recover during 2008 and 2009, as the Agency's work programme gathers momentum.

### FIRED UP

The market for timber fire doors is continuing to expand, according to a recent Timber Fire Doors Survey, the quarterly trends report. The survey, which questioned a representative sample of timber and builders merchants and manufacturers, covers quarter four of 2006 and shows that the industry is optimistic about the future with year-on-year sales, prices and forecasts all looking firmer than previous quarters.

"It looks like the dip in optimism reported in the previous survey will turn out to be a wobble rather than the first signs of a decline in the market," says Richard Lambert, Chief Executive of the British Woodworking Federation. "The growth in the fire doors market in recent years has been driven by changes in regulations...and I expect that the revised Approved Document B published just before Christmas will give further grounds for confidence."

The Timber Fire Doors Survey is produced by Michael Rigby Associates and is sponsored by BWF-CERTIFIRE Fire Door and Doorset Scheme in conjunction with Builders Merchants News magazine. Full copies of the report are available by calling 01453 521621 or from www.521621.com





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# ARCHITECTURAL HARDWARE LTD IAN DOUGLAS/STUART DOUGLAS



s the Northern Ireland economy forges ahead, leaving its troubled years behind, Ian Douglas describes himself as "on the crest of a wave". It seems an apt sentiment. Having started his ironmongery business with his brother just 9 years ago, he now runs a business employing 46 staff with operations in Belfast, Dublin and Galway.

Like many, lan joined the industry from school with no great plans or ambitions but soon realised that he had found his niche: "It was a totally different world then," he says, "far less legislation, a local business based on personal relationships – not help desks! You were generally dealing with owners not managers and on site you relied on shared experience to get the job done."

lan's first employer was Joseph Blairs though he spent the largest slice of his formative AI years working for Belfast ironmongers James E Ball. He was with them for 25 years before breaking away to set up his own business in 1997. That opportunity came with a request to set up a Belfast Branch for Dublin-based company Architectural Hardware Ltd, a traditional AI company founded in 1991 by Paul Barry. Ian was joined by his brother Kirk and former James E Ball employee Jackie Pentland.

"We started out working from the boots of our two cars until we got premises organised", recalls Ian, "We just built it up from there".

Nine years on and after a recent restructuring, Belfast has now taken over as the hub of the entire Ireland business with all purchasing and finance consolidated there. Ian is at the helm as majority shareholder, Paul is Sales Director for the South and Kirk Sales Director for the North. Jackie is also still with them as Director responsible for Estimating.

Completing the team is lan's son Stuart who returned to Belfast last September after 10 years working in the US. Stuart grew up with the AI business working on trade counters and in the warehouse while at University. He returns with wide ranging business experience backed up by an MBA and is now Commercial Director.

"We finally persuaded him that he had a better future in Ireland" says Ian. "He's already. making big inroads and is well into his GAI training".

lan's plan now is to develop the business throughout Ireland based on his successful formula in Belfast. This consisted of two main strategies:

The first was to grow the AI business by expanding the traditional Architect/ Contractor customer base through a wholesale division, that targets the Builders Merchants, Hardware stores, small builders and even DIY outlets. They operate a busy trade counter and showroom staffed by experienced AIs and offer next day delivery on items ordered by 3.00pm. They also have their own lock shop allowing them to offer master key suites in 24 hours.

"Each level of the building trade has different requirements", lan says, "but everyone can benefit from the years' expertise we have available. Between us we have over 200 years of industry experience here".

The company's other key strategy is expanding the product range. Ian Douglas certainly believes in diversification - as a walk round the Belfast warehouse quickly demonstrates: Doors, ladders, lintels, sledge hammers, power tools, Ian is happy to stock just about anything that his existing customers might want. His aim to become a one-stop-shop for Architectural Ironmongery and building products.

"If they're coming to us for door furniture, they might as well pick up building products too", he explains and recounts his amusement when his Warehouse Manager suggested buying a consignment of salt last winter: "He wanted to buy 5 tonnes, so we ordered it in. It was gone in 6 weeks"

AHL also takes advantage of their geographical separation, offering companies a route to an established customer network in Ireland. "That strip of water makes things difficult for suppliers," Ian explains, "They can't justify a dedicated Irish operation but through us they can gain access to wide range of customers throughout the island of Ireland." This is impressively demonstrated by large framed sword on his office wall - a recent Best UK Customer award from Dorma.

But if the strip of water gives a sales advantage, the land border adds an administrative complication. "We have the only UK land border with Euro-land", lan explains, "That means we can be buying or selling in both Sterling and Euros. Any of the paperwork can be in either currency. Believe me, it was quite a tricky operation to get that onto the IT system."

In sales terms, however, the border is becoming less and less significant with business now coming from all parts of Ireland. AHL also supplies a number of their key customers on projects throughout the UK.

In Northern Ireland, the economy has grown considerably in the last few years. However lan is upbeat about even greater things after the recent elections: "If the politicians can finally sort things out between them – and that's a big 'if', there is masses of investment just poised to come."

lan sets great store by the years of experience and technical knowledge of his staff and is passionate about the training offered by the Guild. He has 5 Dip GAIs in the business and another 8 in training. "It's essential to the future of the company. Only qualified people should really be doing the specification" he says. "If people will only talk to us at the design stage we have a wealth of knowledge we can share with them to make their lives easier. Even if an Architect just wants a few specials to his own design we know people who can do that."

His only regret seems to be that some installers don't always follow the same philosophy. "There's a huge amount of pressure on site, everything comes down to speed and cost. Fitters are not always well trained and when furniture is incorrectly fitted and doesn't work people invariably blame the product. Ian cites a favourite example:

"I was called to a site a year or two back and found that a floor closer had been installed in the top transom – I'll give the guy his due, it was working pretty well, but the door was starting to come away!"

In this case, as with many others, Ian and his team were there on site to iron out the problems. With his team's level of experience, there are very few situations that AHL hasn't come across before and it seems unlikely that there are many problems that those 200 years of expertise can't resolve. Perhaps they should have a quiet word with Messers Adams and Paisley.



"If they're coming to us for door furniture, they might as well pick up building products too..."

# A Lot Could Hinge On This

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# BIONETRICS WHY LOCKS MAY DISAPPEAR!

Biometrics is the science of studying physical characteristics of a person such as finger prints, hand geometry or eye structure in order to identify them. Of course, using the body to prove unique identification is not new. Fingerprinting has been around for many years (for example, Historians have found examples of thumbprints being used as a means of unique identification on clay seals in ancient China). More recently, DNA profiling has become a popular method of identification, albeit one not suited to every-day life.

However, biometrics technology has now taken a large leap forward with technological developments allowing analysis of a person's finger, hand, iris and, more recently, the face. This technology is becoming increasingly main stream and is no longer in the realms of science fiction and high security applications. Architect Christopher Sykes looks at futuristic new technology designed to control access.

### **Fingerprint readers**

Fingerprint readers are a secure and low cost biometric solution for access control points that have minimal traffic flow and

small user populations. Fingerprint readers analyse fingerprints located between the tip of a finger and first knuckle. An image is captured by a patented algorithm, which then extracts unique points from the image and converts the data into a unique mathematical template. They are particularly suited for gaining access to secure areas such as key rooms or areas such as computer rooms, document control facilities and laboratories. What's more, the system can be easily integrated into new or existing electronic access control systems to provide a quick and easy retro-fit solution.

### Hand readers

Biometric hand readers are more robust than fingerprint readers. The reader simultaneously analyses more than 31,000 points and 90 measurements of an individual's hand - including length, width, thickness and surface area - to verify that the person using the device is really who he or she claims to be. The system eliminates the need of creating, administering and maintaining cardbased access control systems, eliminates the risk of fraud and is the most proven biometric system available today.

The system is particularly suited to high volume, high throughput access points and for high security environments. Hand readers can also be used as time and attendance terminals ensuring accuracy of payrolls. This saves money compared with traditional clocking in/out time cards, eliminates fraud known as 'buddy punching' where someone can double for someone else and provides the most accurate time and attendance solution on the market.

### Iris recognition

Iris recognition uses a camera to capture a live image of the iris and to generate an iris-code. This is then compared with a reference image stored in the system database. Access is granted if both images match. The size of the database has no impact on accuracy of recognition within the process of identification.

### 3d facial recognition

The latest and most fascinating technology involves facial recognition. The 3D facial recognition system directs structured, invisible light onto a subject's face to create a facial grid of 40,000 measurable data points. The system performs multiple facial scans and comparisons against a database of stored images and corresponding data, performing accurate identification at sub-second speeds, from

which authorised persons are confirmed for access

Ingersoll Rand has decades of experience of biometric systems with over 70000 installations across the world. These include the Northern Ireland Prison Service, the US State Department, Japan Automatic Power Company, Ben Gurion International Airport, Rotterdam Harbour and the Port of Felixstowe.

### **Biometrics in practice**

Biometric hand geometry readers were recently installed at the Port of Felixstowe as Phase 1 of a project which will require all truck drivers to biometrically identify themselves.

By combining smart cards with biometric identification not only have security levels increased, but also cargo handling times have reduced significantly. Linked to a centralised internet based system movement of goods are tracked and efficiency is greatly improved. Hand geometry was chosen for its ability to cope with the harsh weather conditions at the port and because it was widely accepted by the truck drivers over other biometric systems.

The ability to integrate biometric systems into existing time & attendance and payroll software is an added boon. Not only is security heavily improved, but better accounting and attendance records can be maintained.

Biometric access control is becoming the standard system for access control for both small and large-scale sites. Many companies have employed biometrics to control access and not just for sensitive areas. Building sites have recently successfully used handreaders as well as places such as

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"The ability to integrate biometric systems into existing time and attendance and payroll software is an added boon. Not only is security heavily improved, but better accounting and attendance records can be maintained."

the Port of Rotterdam, Selfridges and top London Hotels. It is also believed that control to the London Olympics in 2012 will be will biometric based.





**aij**23

## aij**technical**

# CHANGES TO APPROVED DOCUMENT E

Changes to Approved Document E, first introduced in July 2003, created a new responsibility for the specifier in relation to acoustic performance requirements for door assemblies in certain situations, Rob Mann of Lorient runs through the issues specifiers need to know about the regulations.

or an architectural door assembly, it is more onerous to achieve adequate acoustic performance than it is to meet the fire or smoke requirements, putting big demands on the sealing system. Furthermore, while guidelines for acoustic performance are provided in Approved Document E, these are clearly stated to be minimum requirements. They are widely interpreted, however, as being absolute requirements. In fact, specifiers need to be aiming for higher levels than those recommended.

Building Regulation E1, entitled Protection against sound from other parts of the building and from adjoining buildings, states that "dwelling-houses, flats and rooms for residential purposes shall be designed and constructed in such a way that they provide reasonable resistance to sound from other parts of the same building and from adjoining buildings"

That is the "Commandment" but, of course, it offers no guidance on how to achieve this "reasonable resistance to sound". Approved Document E lays out the recommended practice in order to demonstrate compliance with the Regulation. Most of the content of AD-E is devoted to wall and floor construction and methods of achieving the performance requirement for structure borne sound transmission. Relevant guidance with respect to door assemblies is, however, given in several places, under the heading of "Corridor walls and doors".

There are three main clauses to consider and these are repeated in three separate sections of Document E.

These sections refer in turn to [1] "new buildings" [2] "dwelling houses & flats" where there is a material change of use and [3] "rooms for residential purposes".

On pages 18, 54 & 63 we have identical guidance for separating walls in clauses 2.25 / 4.19 / 6.5

"The separating walls described in this section should be used between corridors and rooms in flats, in order to control flanking transmission and to provide the required sound insulation. However, it is likely that the sound insulation will be reduced by the presence of a door."

This statement sets the scene and draws attention to the important influence of the door assembly.

Then, on the same pages, clauses 2.26 / 4.20 / 6.6 state - "Ensure that any door has good perimeter sealing (including

the threshold where practical) and a minimum mass per unit area of 25kg/m<sup>2</sup> or a minimum sound reduction index of 29 dB Rw (measured according to BS EN ISO 140-3:1995 and rated according to BS EN ISO 717-1: 1997) The door should also satisfy the requirements of Building Regulation Part B - Fire Safety."

It is important to understand that "good perimeter sealing (including the threshold where practical) and a minimum mass per unit area of 25kg/m<sup>2</sup>" OR "a minimum sound reduction index of 29dB Rw" are not equivalents, as implied. This is not an either/or scenario.

The recommendation does not describe what constitutes a "good sealing system". The only valid way to tell a good one from an indifferent one or a bad one is to verify performance under the relevant test regimes. Neither does the recommendation explain that it is technically impossible to get any credible acoustic performance without sealing the threshold. This is, in fact, a necessity and not something that can overlooked. The use of a door leaf of "minimum mass per unit area of 25kg/m\_" is also no guarantee of acceptable acoustic performance, especially if the threshold is not sealed. It would also be very expensive.

The only conclusion to draw is that AD E, while well intentioned, falls short of being sufficiently specific for performance-related considerations. Fortunately, the situation is redeemed with the latter statement with the requirement for a minimum sound reduction index of 29dB Rw. A typical architectural door leaf has a mass per unit area of only 18-22 kg/m<sup>2</sup> but, with a decent sealing system, it can easily achieve 29 dB Rw.

The later reference to "doors meeting the requirements of Regulation B - fire safety" refers to residential situations where corridors are present such as apartments, hotels, care homes, etc. In these instances fire doors are inevitably a consideration, and those fire doors will invariably be required to be smoke doors as well. A conventional FD30 or FD30S door leaf will also have a mass per unit area of approximately 18-22 kg/m<sup>2</sup> and, again, there is no problem to meet an additional acoustic performance requirement of 29 dB Rw - providing an appropriate sealing system is present.

Specifiers, however, should not just rely on a verified fire door assembly to meet the acoustic performance requirements of AD E if it is fitted with unverified seals. While average smoke seals will make some contribution, their performance on a typical ½-hour fire door will fall well short of the 29 dB Rw requirement, (particularly the popular brush-pile types of smoke seal) especially when interrupted at the hinge points and, more especially, without a threshold seal incorporated.

The credentials of the sealing system need to be established and documented, therefore, not just with valid fire and test evidence but also with acoustic test evidence. Any gaps around the perimeter of the door leaf, however, will act as straight-through paths for sound waves, offering practically no resistance at all, even with quite deep stops or rebated edges. For any given door assembly, an acoustic sealing system will be necessary to optimise the performance by effectively containing that serious sound leakage around the edges. The sealing system, of course, may also control the transfer of other unwelcome factors like draughts, dust, and smoke. So with careful selection, just one sealing system can be relied upon to perform all of these tasks.

Both the leaf construction and the sealing system are important considerations in the construction of a good acoustic door assembly. For a general purpose door meeting the 29dB Rw requirement, the leaf will invariably be a solid core construction; minimum 44mm thick usually constructed of chipboard, flaxboard, laminated timber or possibly mineral composite between the outer skins. If the door is well built enough to achieve an FD30 fire performance, a "good",

"dwelling houses, flats and rooms for residential purposes shall be designed and constructed in such a way that they provide reasonable resistance to sound from other parts of the same building and from adjoining buildings"

professional sealing system will additionally enable it to achieve at least 29 dB Rw  $\,$  - more often in the region of 31-33 dB Rw

So, for most typical door assemblies, the sealing system is often more critical than the leaf construction. There are many different seals capable of delivering good acoustic performance and they can be broadly broken down into two basic design types:

• Perimeter: these may be either the compression type, probably fitted on the door stop and relying on some sort of a bulb profile to deter sound waves from getting through

• Wiping: fitted in the rebate and relying on one or more fins to do a similar job. These are very often combined with an intumescent element to control fire spread as well.

In either case, it is important for the seal to remain continuous in the area of hinges or other ironmongery to maintain optimum acoustic performance. Although it might be expected that the knuckle of a standard hinge would provide a significant barrier to the passage of sound, experience on the acoustic test chamber reveals that this is not the case. The hinges, in fact, behave as a straight-through gap and, similarly, the latch. Even quite small interruptions to the sealing system in the area of ironmongery items will lead to substantial transmission of sound waves, especially at medium to high frequencies.

The popular brush-pile type smoke seals are unsuitable as acoustic seals, although they will make a contribution. They are perfectly adequate for containing smoke (basically air particles contaminated with poisonous combustion products). In the case of airborne sound, however, these air particles are vibrating at high frequencies and the brush is not able to resist this vibration as well as a solid fin, or preferably two fins. They are also difficult to use in the ironmongery positions.

For comparison, where a dual fin seal is capable of 31-33 dB Rw, a brushpile type would be more in the region of only 23-25 dB Rw. Threshold seals are less well understood, but as already indicated, they are absolutely essential for effective acoustic door performance and, without one, the required 29 dB Rw is nowhere near achievable.

# Design under cover



# H simonswerk

## TECTUS The completely concealed Hinge System

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# EOIN CORCORAN BALMAR GROUP, DUBLIN

ollowing Eoin Corcoran into his Dublin warehouse building is quite a high-tech experience as he uses a tiny finger-print recognition pad to activate the self-opening doors. Whilst it's obviously a highly secure system, it's primarily there to show customers the level of technology that is readily available these days. It's programmed to allow all his staff access to the building and is a striking demonstration of the degree of sophistication that access control equipment has achieved.

Eoin is impressed with the system "With something like this it's important to be able to show people that it's tried and tested." So have there been any problems? "None at all. - I just hope that I never lose my key" he adds, studying his index finger with a morbid smile.

The building we are entering contains a very large warehouse, and this is only one of two that the Balmar Group occupies on the western outskirts of Dublin. The Group actually consists of two companies: Balmar, the original AI business serving Architects, developers and contractors; and Locks and Hardware, a wholesale business set up 7 years ago to supply retailers including the multiples and chains, locksmiths, other ironmongers, builders merchants and DIY outlets. This allows the Group to serve both the direct sales markets and the Specification business. "It's good not to have all your eggs in one basket." explains Eoin.

Despite being a relatively young company at 37 years' old, Balmar still claims to be the oldest Architectural Ironmonger in Ireland. A sign perhaps, of the extraordinary growth in the construction market in the Republic over the last few decades. The company was founded by two gentleman called Balfe and Martin. They combined their names (in true AI style) to form 'Balmar'. The company still employs three of the staff from the original company, including Martin Mulhall. "One of the original ironmongers" says Eoin, "And one of the most respected"

When Messers Balfe and Martin died, the company was sold to Russell Shannon and Sean Basquille. Eoin joined the company 10 years ago as Sales Director and has since



helped steer the company through a remarkable period of growth.

"At that time the majority of our business was with residential developers", explains Eoin, "As their workload grew and extended into larger commercial developments, we expanded our business along with them. Developers that we worked with then that were building 10 houses a year are now building 1000 apartments per year and more - and we're still working with them. Now their work extends to office parks, shopping centres, hotels, hospitals and schools"

"The market is just bhoyant right now – In housing alone, this year 90,000 houses will be built in Ireland, 8 years ago it was 40,000. In the commercial markets the increase is probably even greater, this is the area where we're currently pushing hard. It's a huge business for us."

One of the Balmar Group's key strategies is to hold a high level of stock. This business model originated to supply small developers who didn't have sufficient staff to schedule the ironmongery, but today it allows developers and contractors to have a reliable supply at short notice. This explains the two large warehouses.

"I think we have about 30,000 square feet of space," Eoin explains. "We hold around €3m worth of stock at any one time. It suits the way we like to do business. Customers can be 99% sure that we'll have what they need, and if it's ordered before 6.00pm we'll generally get it to them the next day – anywhere in the 26 counties. They come to rely on us for that – and that works well for us all"

This major commitment to stock is coun-

terbalanced by an extremely efficient sales and management organisation. "Over the two companies, we have a sales force of 7 and an overall head count of just 30" says Eoin. "Impressively, 13 of these staff are sitting GAI examinations this year. "We actually had to ask the Guild to split the examination days for our candidates so that we could keep the company operating" says Eoin. "I must pass on my thanks to Keith Maer at the Guild who was immensely helpful in sorting it out for us." The company prides itself on the high quality of its staff and all new members are encouraged to take the GAI route.

To help develop the increasingly sophisticated Access Control and Hotel lock sectors, Balmar has specialist teams to work with developers and designers to advise and recommend these products. Much of Balmar's latest hotel equipment comes from US company Saflok. "America is at the forefront of high-tech access equipment," explains Eoin, "It's having a huge global influence and is a big growth area for us. Things like wireless door control and monitoring are now quite common – it's ideal for older buildings as it reduces the wiring considerably"

So what about life with the Euro? It's a

guestion that makes Eoin's eyes light up: "It's absolutely superb!" he enthuses, "The best decision we've ever made in this country. It makes it so much easier to buy in Europe. Quite apart from the huge trading benefits in Europe and the rest of the world, just to be able to travel round the EEC with a single currency is fantastic. If only you guys in England would join; I'd love to see that." This sentiment is in part because Balmar still buys the majority of its products from UK companies. "We appreciate that much of it is now sourced in the Far East," he admits, "But we won't buy it from there direct, we only go through our established suppliers. We respect their design and quality control. I like a CE mark to mean what it says - do you know what I mean? That's maybe something that the Guild could tighten up on"

The other reason Eoin likes to trade with his established suppliers in the UK, Europe and America is simply the relationships that they have. "I love doing business with the Italians", he says, "They are flexible, creative – and fun. We will always need Italians for design"

"We must try and return to quality as the overriding consideration when selecting product. At Balmar we always try to sell the technical side of the product - the features and the benefits, not on the basis of price. Price is such a shortsighted route to take. It's the moving parts in a building that take the most punishment. All we want to do is provide good value. We respect the relationship we have with our customers and hope they will do the same with us."

Few in our industry will disagree with Eoin Corcoran on that sentiment.



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## aij**liverpool**

### **PARADISE FOUND**

The wide scale regeneration of Liverpool in preparation for becoming European Capital of Culture has now included the construction of a new multi-million pound Bus Interchange, created by Grosvenor's Paradise Project for Liverpool One which features a variety of products from GEZE.

The new Interchange, designed by Wilkinson Eyre Architects, forms the gateway to the £900 million Liverpool One development, a unique combination of shopping, residential and leisure facilities over 42 acres in the heart of the city. Home to ten bus stops, each designed to take up to 20 departures every hour, the Interchange needed to be visually striking and welcoming and was designed around concepts of safety and accessibility.

As part of the simple, transparent design, and in order to allow the Interchange to be both functional and safe, GEZE supplied up to three sets of DDA compliant Slimdrive SL bi-parting automatic door operators for each of the ten bus stops. These control systems have been specifically designed to open at the same time to allow passengers to access all three doors on the modern 'bendy' buses simultaneously. This unusual type of access has been specially tailored to allow Paradise Street Interchange to have complete flexibility over its operation. The slim, 7cm deep door drives are cleverly concealed beneath special weatherproof cladding, fitting discreetly into the bus stops and complementing the clean lines of the structure.

Meanwhile, in order to protect passengers fully, pocket screens have been used to provide an extra barrier between people and the automatic doors at the bus stops, preventing them from trapping their fingers between the sliding doors, whilst still allowing access for cleaning and maintenance.

To enhance functionality, GEZE also supplied induction loop activators, which activate the doors at each bay to open only once a bus has parked into position. This means passengers cannot leave the safety of the bus stop until the bus is ready to board.

GEZE's UK specification manager, Paul Wyatt, said: "We're delighted to be involved in such a prestigious project. It is another example of how the GEZE Slimdrive SL combines aesthetics with functionality.

"As well as supplying products for the Interchange, we also will be a part of other projects on this development, demonstrating GEZE's flexibility in supplying a number of different solutions for a wide range of situations."





### aijnewquay

### LOVE FIFTEEN

HOPPE's stainless steel lever handles have helped complete the design of Jamie Oliver's new restaurant, Fifteen Cornwall, in Newquay. Local agency Absolute Design specified handles from the leading door and window hardware supplier as part of its brief to "exploit the contrast behind fine dining and a beach hut", which has been adapted to house the new restaurant.

Wessex Ironmongery regularly buys a variety of products from Hoppe and provided the handles for the restaurant. Owner Chris Blacker states: "We automatically chose Hoppe's hardware for this project because they are reliable, quality products that are commercially hard wearing."

Helen Blake, Managing Director of Absolute Design explains: "Every aspect of the design for Fifteen Cornwall was thoroughly considered to give a consistent and quality driven finish, right down to the choice of door handles. The oversized, brushed stainless steel push/pull handles don't need constant polishing and really complement the rest of the dramatic design".



### aij**bristol**

### **STUDENTS ENJOY SECURITY**

Ingersoll Rand's CISA Electronic Locking Systems and Dor-O-Matic low energy operators are protecting students and buildings at the University of the West of England.

The UWE campus at Bristol is a new £77 million student village. It is one of the first educational projects to be built under new UK Building Regulations and draws on the latest and best practice in terms of accessibility, acoustics, security and sustainability.

The University required products that would protect both the students' personal security and their property. Apart from conforming to the new Regulations, it was very important to make savings in operating costs and to enhance the overall security of the campus accommodation.

Ingersoll Rand Security Technologies was selected because the company was able to provide a fully coordinated package of products and services that would meet the detailed brief, protect the students and secure all the environments.

Electronic Locking Systems are installed on doors to the self-contained apartment units which house nearly 2,000 students. The facilities also incorporate nearly 100 Dor-O-Matic low energy operators to provide ease of access for disabled students.

### aij**woodbridge**

### **TOP FLIGHT PARTNERS**

Window hardware manufacturer Securistyle and KEB Fabrications Ltd (KEB) have soared into action at RAF Woodbridge in Suffolk, where MOD service accommodation has been refurbished.

KEB fitted window locks and friction hinges manufactured by Securistyle in the contract that was managed by Kiers, who chose KEB to be their supply chain partner for the windows and doors contract.

The combination of Securistyle's high quality product range and KEB's sector experience meant that with more than 3000 windows to be supplied, Kiers could be sure of a continuous reliable output, with a second to none quality requirement, and the BSI specification being adhered to.

Lawrence Breakspear, managing director of KEB, said: "With lines of good communication set up, we soon became one of the main corner stones of the supply chain, communicating with the client and the other members of the supply chain."

The windows were made from Profile 22's 70mm suite of profiles, with Securistyle locks and friction hinges completing the highly specified windows. "By using a high quality system like Profile 22 and high performance quality locks and hinges by Securistyle, we can match any performance specification requirement and usually exceed it," said Lawrence.

A Kiers spokesperson added: "Without a doubt partnering with KEB and its supply chain partners did greatly enhance the success of this project. It proves that genuine partnering does work."





# aijmiddlesbrough

### BABY DAYS

A continuous geared hinge/concealed door closer combination has been used to create a safer, more comfortable environment in a specialist mother and baby unit at St Luke's hospital in Middlesbrough.

The unit has been specifically designed to accommodate new mothers with post-natal difficulties. As such, a number of factors have been taken into consideration to ensure that all areas are not only homely and less institutionalised, but also as safe as possible.

The selection of hardware for doors was given careful attention by the Tees, Esk and Wear Valleys NHS Trust, who turned to specialist door solutions company, Intastop, to provide the answer. The objective, to provide an effective anti-ligature solution whilst retaining a domestic atmosphere, was achieved using the company's anti-ligature continuous geared hinge in conjunction with Samuel Heath's Perko Powermatic, concealed door closer and selected anti-ligature furniture.

The combination of the Perko Powermatic, door closer and Intastop hinge also enhances accessibility within the unit; Perko Powermatic, meets the opening force recommendations of BS 8300 and Approved Document M, whilst the Intastop continuous hinge incorporates low friction bearings and distributes the door weight more effectively than standard hinges.

With the Intastop hinge running the entire length of the door, the Perko Powermatic, controlled, concealed door closer was able to be fitted at a position no more than one metre from the bottom of the door. This, together with the hinge's special antiligature tip and the fact that the closer is totally concealed when the door is closed.

## aijcolchester

### HOPPE LEADS ARMY LIFE

Phase one at the old Colchester Garrison, the second largest Private Finance Initiative (PFI) contract after Heathrow Terminal 5, is now complete. The £560 million project involved renovating the buildings at Merville Barracks, the new home to Colchester Garrison and Headquarters 16 Air Assault Brigade.

John Murphy, Owner of JM Architectural Ironmongery, supplied over 4,000 sets of lever furniture and pull handles from HOPPE's Paris range to complete the finishing touches to the state-of-the-art accommodation. John, who has been in the ironmongery business for 30 years, explains: "HOPPE's hardware was chosen for this project because it fitted all the criteria – it is reasonably priced for a great product range. The modern looking hardware fits perfectly in the new, purpose-built barracks.

"Servicemen and women perform the most critical, difficult and dangerous role for the country," John continues, "and their conditions of service should reflect this extraordinary contribution with the quality of living accommodation they deserve."





## aij**london**

### **GORILLA TACTICS**

SIMONSWERK hinges have been fitted throughout the new Gorilla Kingdom at London Zoo. The fantastic new Gorilla exhibit officially opened at Easter this year and will give the Gorillas, as well as other animals such as Colobus monkeys, more space and an exciting setting for visitors to view in a sub tropical style environment.

The Variant VX range of heavy duty hinges, used for the Gorilla houses, were supplied by SIMONSWERK customer Franchi Locks & Tools in conjunction with Architects Proctor & Matthews. This major project benefited from close cooperation between the specifier, manufacturer and the Zoological Society of London – ZSL. The hinges were fitted by contractor Crispin & Borst.

SIMONSWERK VX hinges, in stainless steel, were chosen for both the internal and external doors of the new Gorilla houses to provide specific high load capacity with maintenance free, smooth performance and 3D adjustment. ZSL confirmed that the success of the SIMONSWERK hinge application will now be considered for extending to their hinge replacement programme

for other animal houses at both London Zoo & Whipsnade Wild Animal Park.

### aijliverpool

### **PEAK PRACTICE**

HOPPE hardware was specified for the UK's first dedicated moorland research centre in the Peak District National Park. The Moorlands Visitor Centre is the cornerstone in the £4.7m 'Moors for the Future' project funded by the Heritage Lottery. It offers community facilities, a national focus for moorland research and interactive exhibitions for the public.

Dove Architectural Hardware worked on the project with NSJ Contractors Ltd, and had to consider the Disability Discrimination Act including BS8300 and Approved Document M for the project. "But we needed products that fitted the high-tech feel of the project too," says Dove Architectural Sales Director Andy Wearden. The design of the Moorland Centre reflects its upland setting, with a living roof of sedum turf, intersected by a waterfall tumbling over glass panels into a pool at the entrance. The turf acts as an eco-friendly insulator and the building is fuelled by an energy-saving ground source heat pump. "HOPPE's door closers and stainless steel semi-circular levers fitted perfectly into this environment. They're far more stylish than many conventional products on the market, whilst satisfying the recommendations of BS 8300 and Approved Document M."





# AWARD-WINNING DESIGN FROM DORMA

DORMA is overhauling the design and performance of some of its best-selling door closers. The new DORMA TS93 CONTUR design concept, which has been recognized with the German Red Dot design award, features inset end caps with an attractive perforated design, clearly defined cubic lines and a uniformed appearance for co-ordinated project work with similar aesthetics to other DORMA products. The new CONTUR concept has been applied to:

ES200	Automatic sliding door operator
ED200	Automatic swing door operator
TS97	Door Closer
TS92	Door Closer (available May 2007)
TS91	Door Closer (available May 2007)

As well as the new design, DORMA has made performance improvements.

The current TS93 model satisfied the opening force requirements of Approved Document M and BS8300 on doors 875mm or wider. However the new improved TS93 CONTUR meets the requirements on doors of 767mm or above.

Tests at the MPA Test House in Germany which details the high efficiency of the new unit demonstrate that when fitted at size EN3 (18Nm) the new TS93 CONTUR produces an opening force of 23Nm, this results in the unit producing an opening force of 30Nm or less on doors 767mm wide and above.

As with the previous version, the new TS93 CONTUR also provides adjustable power, 'thinking backcheck' and adjustable delayed action, all essential criteria for specifiers looking to comply with AD M and BS8300.



# A CLEAR ADVANTAGE

Turnstyle Designs has launched its latest innovation in architectural hardware. After over a year in R&D, the company can now offer a range of door and furniture handles using fabrics, wallpapers and other materials encapsulated in crystal clear acrylic.

As well as a stock range of standard fabrics, Turnstyle can, subject to a minimum order custom produce designs to marry hardware with curtains, wallpapers and other soft furnishings.



### A SIMPLE AND EFFECTIVE SOLUTION

ABUS has launched a new product which makes it simple for locksmiths to integrate as many padlocks as needed into master and grand master suites, a simple solution to a problem that accounts for a very profitable part of the locksmith's business.

The new ABUS 86/55 looks like a conventional, robust 55mm brass padlock with a hardened alloy shackle but at the base of the padlock it takes any standard adjustable cam 30 x 10mm half Euro cylinder as its security mechanism without the need for any specialist tools.

This makes it simple for locksmiths to integrate as many padlocks as needed into master and grand master suites, whether part of a unique section, shared section, or just their preferred cylinder brand, supplied in to schools, hospitals, offices, factories or any commercial and industrial security system.

This capability and its low cost makes the 86/55 the ideal solution to the locksmith's grand master padlock dilemma. The ABUS 86/55 is freely available in the UK through HOPPE

# FIRE HINGE FROM R&T

Royde & Tucker now provides pre-cut intumescent hinge pads for use on fire doorsets to ensure that, when installed, the hinges comply with the appropriate fire test certification. Intumescent material is almost always a requisite for ironmongery to comply with its fire test evidence, i.e. as the item was fire tested with a specific intumescent then that same intumescent should also be present on-site.

Frequently, either no intumescent is offered with the item of hardware and therefore not installed or it is installed with another type of intumescent, typically brought from a third party. This practice can invalidate the test evidence for that item – and therefore the doorset as a whole. To help prevent this, Royde & Tucker has a wide selection of die-cut intumescent hinge pads, cut to accommodate not only the size and shape of the hinge but also the specific screw fixing positions.

Royde & Tucker hinge pads are "Interdens", a mono ammonium phosphate based Intumescent, mixed within a 1mm fibreglass carrier. The strands of fibreglass ensure virtually no compression when used as a hinge pad, unlike other more malleable types of intumescent, which can compress and expand

BRINGING THE OUTSIDE IN over time, causing screws and fixings to work loose.

The hinge pad range is suitable for fire doors up to FD60, ensures compliance with test evidence and provides concealed protection for the hinge, and therefore the doorset, in the event of a fire.



The interface between house and garden will play an increasingly important role for architects and designers as Britain's summers continue to warm and outdoor leisure becomes an increasingly valuable asset. New E3 folding door systems from Häfele will access spaces in walls up to 16 metres in width for a seamless interface between houses and gardens, patios and terraces.

The system can handle doors weighing up to 80kgs and measuring 3000mm in height and 1000mm in width. A maximum of 16 doors can be hung in tandem to open inwards or outwards, 8 doors to each side. A system called SureLock on the pivots and carriers allow the door panels to be precision adjusted for height and position using only a screwdriver.

The hardware has undergone extensive weather sealing and performance testing by Häfele and their suppliers who offer a 10 year guarantee on the product. New E3 folding doors are top hung on precision engineered trolley hangers which allow the system to open effortlessly, whether inwardly or outwardly, even when running with the maximum 16 panels. There are no



The use of stainless steel and non-ferrous materials in the hardware construction promotes outstanding corrosion resistance, even in the most hostile environments including exposed coastal situations. The seal of the panels when ensures closed the exclusion of even the very worst of British weather and adjustment scope accommodates everything up to and including a degree of building settlement.



### IDEAL HEAVY DUTY HINGE

The latest hinge development from leading European manufacturer SIMONSWERK, their VARIANT VN heavy duty hinge, is proving to be the ideal system for fitting in hotels, hospitals, schools, airports, and public sector buildings. Utilising only 2 hinges for up to 120kg weighted doors the VN hinge, with concealed bearings and maintenance-free operation, provides outstanding performance and stability.

The CE marked, fire tested VN hinge is available in a choice of satin stainless steel, brass plated steel or satin nickel finishes. It is especially suitable for heavier weight doors in constant public and staff daily use where a reliable and smooth door action is an essential requirement.



# COMPLIANCE THE KEY FOR DOOR CLOSERS

The TS 1200 door closer has been introduced by GEZE UK, as demand increases for an inexpensive solution that still achieves regulatory requirements.

A highly effective rack and pinion, the TS 1200 has 70%+ efficiency and is supplied in a universal pack, complete with all fixings. Simple to install and easily maintained, it is unobtrusive and stylish.

The CE marked door control system (0672-CPD-0070) is fire tested to EN1634-1 and is manufactured, tested and quality controlled according to EN 1154:1996. In addition it is CERTIFIRE approved (CF 144).

# POCKET DOOR ACHIEVES FD30

Royde & Tucker announces the launch of a fire rated version of its Pocket Door system. Rated to FD30 for 30 minutes integrity, this solution bridges the requirement for a fire door on a kitchen or escape route whilst incorporating the space saving benefits of a pocket door.

Maximising the available floor space by locating the door within the wall cavity, the RT pocket door system can save up to 6 per cent of overall floor space, or about 10 sq ft per door, in addition they can be used for any non fire-rated interior door. The RT pocket door system comprises the latest sliding door technology with robust, high quality components.

The FD30 kit is a user-friendly set of components including bespoke hardwood door frame linings, intumescents and seals for use with a standard 44mm FD30 fire door. Kits can also be supplied with a self-closing device for ease of operation.



## aijlegal matters



### Case 1

E was recruited as a temporary receptionist, to cover staff shortages over the summer months. Her hours of work ensured that she was at the reception desk and switchboard as soon as customer calls came in early in the morning and that she was available to cover the business' traditionally busy times of day.

During her first month at work, E disclosed to her manager that she had recently been diagnosed with diabetes, but that the disease was controlled by medication and did not cause her any problems. Her manager did not take any action as a result of this disclosure.

During her first few weeks at work, E took one day's agreed holiday and she also took agreed time off for a doctor's appointment. However, she had four days' further absence, which she stated were due to illness. E also arrived late at work on a number of occasions and on two occasions was away from her desk for a considerable time.

After one month, E's manager approached her at the reception desk and explained that E's attendance and timekeeping were unsatisfactory and that she was therefore terminating E's employment. E was paid one week's pay in lieu of notice.

Shortly after her dismissal, E wrote a short letter to the company's senior manager, that said only:

'I have a grievance about my dismissal as I think I have been treated badly all things considered'.

The senior manager replied in writing that, having talked to E's manager, he agreed that E's poor attendance and timekeeping were unsatisfactory, particularly as she had been recruited to cover a period of understaffing. He explained that no meeting had been held with E because of her short period of service. He did not feel her dismissal had been unfair.

E took out a claim in the Employment Tribunal. She claimed that she had been discriminated against because of a disability (diabetes) and that she had taken out a grievance in writing. She stated that her absences from work were occasioned by episodes of hypoglycemia due to poor insulin control and that she had been away from her desk measuring her blood sugar and injecting insulin.

#### **Issues:**

1. E's manager had not followed the Dispute Resolution Regulations when dismissing E. She had not been invited to a disciplinary meeting in writing, had not been allowed representation, or to state her case, and had not been forewarned of the possibility of dismissal. Although her dismissal had been confirmed in writing, she had not been reminded of a right of appeal. 2. E's appeal/grievance was not heard at a meeting, neither was she asked whether she agreed to having it dealt with in writing under the Modified Grievance Procedure.

**3.** E's letter of grievance did not set out clearly the reasons why she was aggrieved, for example, she did not mention her diabetes.

4. E's manager had done nothing in relation to E's information

about diabetes and had not considered whether E's poor attendance or timekeeping could be related to that condition.

She had not considered whether any reasonable adjustments could have been made which would have assisted E in carrying out her duties properly.

#### Likely outcome:

**1.** A failure to follow the Dispute Resolution Regulations does not in itself entitle an employee to take out a tribunal claim. It is therefore tempting to dismiss an employee with under one year's service without going through the process of letter writing, meetings and appeals. However, this is an unwise approach. If an employee has the right to bring a claim with out one year's service, for example if they claim to be disabled within the meaning of the Disability Discrimination Act, then any compensation awarded could be enhanced by between 10 and 50%.

**2.** The failure of E's manager to address any point arising from E's disclosure of diabetes or to consider it in relation to E's dismissal makes it likely that a tribunal would consider discrimination had occurred. E's manager should have made sure that relevant senior managers and first aiders were confidentially informed of E's condition and it would have been prudent to have obtained a medical report and discussed the question of reasonable adjustments with E.

**3.** However, E's letter setting out her grievance lacked detail. The Employment Appeal Tribunal have recently stated that a grievance should set out the essential reasons why the employee holds the grievance in sufficient detail to allow the employer to respond. Here, E's lack of detail would probably mean that she had not submitted a proper grievance and therefore had no right to go to tribunal.

### Case 2

H was employed as a salesman by a company which happened to fit locks in a local school for special needs children and in an old people's home. H was concerned that the company's IT system was vulnerable to hackers who could discover details about the systems used by the company and that this could put vulnerable people at risk. H reported this to his manager, and when no action was taken, to the Company Secretary, who felt there was little risk of attack to the computer system. H therefore hacked into the system himself, causing thousands of pounds worth of damage. He was dismissed for gross misconduct. H claimed unfair dismissal. He claimed that he was protected under 'whistle blowing' legislation, which makes it automatically unfair to dismiss someone for making a Public Interest Disclosure. Had H gone to the school or old people's home with his concerns, and then been dismissed, he may well have been protected by this legislation. However, in hacking into the system himself, H had gone too far. His dismissal was on the grounds of misconduct, not for making a protected disclosure and was fair in all the circumstances.



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