



## **The Guild of Architectural Ironmongers Response to the Independent Review of the Building Regulations and Fire safety call for evidence**

Guild of Architectural Ironmongers  
BPF House  
6 Bath Place,  
Rivington Street,  
London,  
EC2A 3JE

Douglas Masterson B.A.(Hons), DipGAI, RegAI, MInstAI  
GAI Technical Manager  
[douglas.masterson@gai.org.uk](mailto:douglas.masterson@gai.org.uk)  
07469 141 657

## Introduction

This response to the Independent Review of the Building Regulations and Fire Safety Call for Evidence is the opinion of the architectural ironmongery industry and is based on full consultation with the membership of the [Guild of Architectural Ironmongers](#) (GAI) through the GAI Executive Committee, Technical Committee and an online survey of entire membership to elicit their opinion on all ten questions provided in the Call for Evidence.

This document will concern itself primarily with fire safety and regulatory issues from the perspective of the architectural ironmonger.

To provide further clarification the term “architectural ironmongery” can be defined as the manufacture and distribution of items made from iron, steel, aluminium, brass or other metals, as well as plastics, for use with doors, door assemblies, doorsets and windows in all types of buildings. Such items, sometimes also described as architectural or building hardware, include door handles, locks, door closers, hinges, seals, window fittings, handrails and balustrading. Architectural ironmongery is subject to more than 60 British and European standards.

The architectural ironmonger plays a vital role, working with architects, interior designers, contractors and others, to schedule and specify the hardware for every door and window in a building and to produce a full fixing schedule of hardware items which are fully compliant with all the latest regulations and standards.

Architectural ironmongery is also an essential and intrinsic part of a fire door. Without its correct specification, supply, installation, inspection and maintenance a fire door will not be able to function correctly. It is also critical to a building’s security and accessibility.

On a daily basis, fire doors will also be used for their security, privacy, acoustic or thermal performances. This use and potential misuse gives many opportunities for their fire performance to be compromised. It is a sad fact that many fire doors do not work correctly due to poorly specified, fitted or maintained ironmongery, in addition to the constant misuse and abuse of what is a critical life safety feature. Fire doors play a critical role in the passive fire protection of a building.

## The Guild of Architectural Ironmongers

The Guild of Architectural Ironmongers (GAI) is the only trade body in the UK that represents the interests of the whole architectural ironmongery industry - architectural ironmongers, wholesalers, hardware manufacturers and door manufacturers. Its reputation is built on three key areas: education, technical support and its community activities. Its qualifications, education and CPD programmes are widely respected in the UK and overseas, including the GCC and Hong Kong. Its technical information service is the only specialist service of its kind, providing members with comprehensive advice on issues relating to the legislation, regulations and standards governing the use of architectural ironmongery and related hardware. Its awards recognise and reward personal and business excellence. There is a range of company and individual membership options for those working in and around the architectural ironmongery industry depending on their role, their qualifications and their experience.

The GAI has been providing a unique education, qualification and CPD programme for people who work in and around the architectural ironmongery industry since 1961. Most aspects of the GAI education programme are available and recognised worldwide. There are more than 2,600 GAI Diploma holders to date in 25 countries. The GAI's education syllabus is the only recognised programme in the world that leads to a qualification in architectural ironmongery to British and European standards.

The GAI is run by the industry for the industry and currently has over 300 member companies worldwide (see Appendix A for list of UK member companies).

# The overarching legal requirements

## QUESTION 1

To what extent are the current building, housing and fire safety legislation and associated guidance clear and understood by those who need to follow them? In particular:

- **What parts are clear and well understood by those who need to follow them?; Where specifically do you think there are gaps, inconsistencies and/or overlaps (including between different parts of the legislation and guidance)? What changes would be necessary to address these and what are the benefits of doing so?**

Unfortunately, it is felt by Guild of Architectural Ironmongery (GAI) membership that current fire safety legislation is unclear for those of us who need to understand it. There are simply too many regulations and standards which do not align with one another with regards to their recommendations for fire safety. Current legislation allows provisions to be made whereby the user can demonstrate their ability to meet the standard or regulation in a different way but all this achieves is a compromise on safety and a de-valuation of the standard or regulation itself. These should be clear, concise on their requirements and enforced.

Changes necessary to address issues of conflict would be to ensure that all legislation, documentation, standards, guidance or any other documentation advising on the specification of fire safety hardware in construction all outline the same requirements. There should be no ambiguity or margin for compromise on what products should be specified or what “provisions” could be used to meet a standard via another means.

Many standards within the industry are also not mandatory for building construction (For example BS 8300 relating to accessibility) and are seen purely as best practice guidance. This can be confusing to architects and construction professionals since they themselves are unsure as to what guidelines they should actually be following.

### Relevant fire safety documents

To emphasise further, the following is a list of some of the main types of documents and legislation which are relevant to fire safety specifically within the architectural ironmongery and the allied fire door industries:

- Law such as The Regulatory Reform (Fire Safety) Order and the Equality Act (2010)
- National Building Regulations which are clarified in greater depth in Approved Documents in England and Wales

- Approved Documents in England and Wales such as Approved Document B, Approved Document M, Approved Document E, Approved Document Q, Approved Document 7, Regulation 38.
- Equivalents to Approved Documents in other jurisdictions in UK eg Technical Booklet E in Northern Ireland and Technical Handbook Fire: Domestic and Non-domestic in Scotland. It should be noted that whilst these are broadly similar to Approved Documents there are on occasions differences in content and terminology.
- British Standards – either product based eg BS 3621 for thief resistant locks or Codes of Practice such as BS8300 Design of buildings and their approaches to meet the needs of disabled people.
- Harmonised European Standards (hENs) There are some European Standards which must comply with the EU Construction Products Regulation no 305/2011, such as BS EN 1154 Controlled door closing devices, requirements and test methods. This means that certain essential items of hardware which are critical to the function of a fire or escape door such as hinges, door closers, locks and panic hardware must be successfully tested and be CE marked with a corresponding Declaration of Performance available.
- Non-harmonised European Standards- There are other European standards which are voluntary and therefore compliance is not mandatory on fire or escape doors in the UK such as BS EN 1303 Cylinders for locks, requirements and test method. Although these are not mandatory the Guild of Architectural Ironmongers do vigorously promote compliance to these standards as best practice amongst its membership through education and CPD training.
- Codes of Practice such as [The Code of Practice for hardware for fire and escape doors](#) are also in existence. This is referred to in Approved Document B and was co-written by the Guild of Architectural Ironmongers (GAI) and the Door and Hardware Federation (DHF).
- Standards for fire testing hardware, fire and smoke doors. The BS 476 series of standard dictates the appropriate fire tests for elements of structure/material and grades the level of fire resistance accordingly. On door hardware these must comply with BS 476 22. BS EN 1634 is the series of fire resistance tests for door and shutter assemblies. Both sets of tests are acceptable in the UK and both are listed in Approved Document B.

### **Approved Document B**

A number of issues have been highlighted by the Guild of Architectural Ironmongers membership on a lack of clarity in Approved Document B in particular and a need to revise and update it in order to remove any such ambiguities.

Specific issues relating to ADB within the architectural ironmongery industry which have been raised by the Guild of Architectural Ironmongers membership as follows:

“The Approved Document B requirement for fire doors to be self-closing is not defined until page 143. In this a Self-closing device is defined as “A device which is capable of closing the door from any angle and against any latch fitted to the door”. This requirement is of massive importance and should be highlighted much earlier in the document. It should also include the word “fully” between “of” and “closing”. A fire door will only work if it is fully closed in to its frame”.

Another issue highlighted relates to escape and panic door hardware. “There is minimal understanding of what represents an escape door and of the minimum requirements for the means of escape hardware. There are three published BS standards that relate to escape route hardware yet only one of these (BS EN 1125 for panic escape) is directly referred to in the Approved Document B, whereas BS EN 179 (for emergency escape) is not despite BS EN 179 being a harmonised standard (hEN) under the Construction Products Regulation. Under ADB we also allow the electric unlocking of escape route doors with systems that do not have to be performance tested when we now have a published standard that should be used (BS EN 13637).”

The issue of escape hardware and the necessity of using product which is mandatory under the UK and European Construction Products Regulation is not addressed at all in Approved Document B.

To back the necessity of updating Approved Document B further, recent research commissioned by DCLG in February 2017 on ADB (as well as ADM on accessibility) has found that it “should be clearer and easier to use” and that “users want clearer diagrams and pictures and simpler languages” it was also requested that it should be “less cluttered”. For survey detail click [here](#).

It should also be noted that ADB has not been fully revised since 2006, whereas European and British Standards are scheduled for revision every five years.

### **Approved Documents generally**

There is also an issue where Approved Documents are not in agreement with British Standards which can lead to confusion in the marketplace. One example of this is the circular handrail recommended diameter in BS 8300 is 32mm to 45mm diameter whereas in Approved Document M it is 40mm to 45mm diameter.

There are also occasions where the differing requirements within the Approved Documents make it extremely difficult to specify and supply product which is compliant with each document. Practising architectural ironmongers need to be mindful of ADB for fire safety, whilst considering ADM for accessibility, ADQ for security of residential doors and ADE for the resistance of passage of sound. An example of this is ensuring a fire door can be opened using the approved opening forces from ADM, ensure the door closes from any angle under ADB, has the correct acoustic seals (under ADE) which do not hamper the door from closing fully in to its frame (under ADB) and in addition ensure that the door hardware if on a fully tested security door set under ADQ works and functions correctly. Approved Documents in general should be written in such a way that the requirements of each one do not contradict another which is not currently the case.

### **The Regulatory Reform (Fire Safety) Order RR(FS)O**

The Regulatory Reform (Fire Safety) Order 2005 changed the approach to fire safety in the UK where the legal duty for assessment and management of fire risk sits with the person who is ultimately responsible for the building and not with the fire service. The fire service has a statutory duty under the Regulatory Reform Fire Safety Order to enforce fire safety as opposed to providing sign-off which is a change in responsibility from prior to the RR(FS)O.

It is a recommendation of the Guild of Architectural Ironmongers that a change to The Regulatory Reform (Fire Safety) Order 2005 be made to have greater involvement of the Fire Service with regards to the sign-off of buildings once more. The current deregulated and non-prescriptive approach to fire safety is seen by many as a real concern.

### **Fire Safety Laws**

Further confusion also ensues as laws which relate to Fire Safety also vary within each jurisdiction in the UK and use differing terminology for the same function. For example, England and Wales have The Regulatory Reform (Fire Safety) Order which details the duties and responsibilities of the “responsible person”. Northern Ireland has the Fire and Rescue Services (Northern Ireland) Order 2006 and Fire Safety Regulations (Northern Ireland) 2010 which details the “appropriate person” in this circumstance. Responsibility for complying with the Fire (Scotland) Act 2005 and the associated Fire Safety (Scotland) Regulations 2006 rests with the “Duty Holder”. Such differences in terminology for what is effectively the same role further complicates matters.

# Roles & Responsibilities

## QUESTION 2

Are the roles, responsibilities & accountabilities of different individuals (in relation to adhering to fire safety<sup>1</sup> requirements or assessing compliance) at each key stage of the building process<sup>2</sup> clear, effective and timely?

In particular:

- Where are responsibilities clear, effective and timely and well understood by those who need to adhere to them/assess them? and, if appropriate
- Where specifically do you think the regime is not effective?
- What changes would be necessary to address these and what are the benefits of doing so?

Put simply, according to the Guild of Architectural Ironmongers (GAI) membership, these roles, responsibilities and accountabilities as outlined in the question above are not understood by all as being clear, effective or timely.

Fire safety is intrinsic to each stage of the construction process as follows:

- Specification
- Procurement
- Installation
- Product usage
- Inspection
- Maintenance

The following points are how the Guild of Architectural Ironmongers (GAI) view each of the stages and how these relate specifically to the architectural ironmongery industry, including where fire safety matters may be improved.

### **Specification of product.**

The correct specification of ironmongery on a door – particularly on a fire or escape door is of vital importance to its proper function. The architect or designer should work closely with a qualified architectural ironmonger who will provide a fully compliant specification for the building. Qualified architectural ironmongers spend years being trained in product knowledge, standards and legislation as well as the ability to specify the correct product for each application. The [DipGAI](#) course can last up to 3 years and Continuing Professional Development leading to the [Registered Architectural Ironmonger \(RegAI\)](#) qualification is an ongoing process whereby CPD points must be earned each and every year. Many GAI member companies within our industry employ these qualified specifiers to perform this role, having the appropriate indemnity insurance in place to do so.

As one of our members states “The designs of the buildings themselves seem to be well in order when it comes to the plans that I have worked from, but the buildings will not function as intended and required if the ironmongery specification and supply is incorrect. I feel that the ironmongery



specification should only ever be created by somebody in possession of the GAI qualification. I do not believe it is reasonable to expect any one entity to be fully versed in the myriad legislation involved in a building's design and construction, so closer cooperation between the various disciplines (architects, ironmongers etc) is essential to ensuring that everything is specified correctly."

Using an unqualified person to put a specification together, particularly with regards to fire or escape doors can result in a building with doors which are not fit for the purpose they were intended for. It is the responsibility of the architect to ensure the specification is fully compliant by using a "competent person" to write the specification. It should therefore be logical that only a fully qualified ironmonger should write a specification for a building and this is the recommendation of the Guild of Architectural Ironmongers.

### **Procurement.**

This is where the specified product is procured or an alternative solution is sourced by the main contractor or joinery sub-contractor.

Frequently this is an area where a specification which is written by a qualified architectural ironmonger is tendered to the lowest bidder, often without the proper checks to ensure that the "equal and approved" alternative is in fact "equal".

As one of our GAI members states "Not all the supply chain realises their responsibilities in the process of manufacture, supply, installation and combination of materials in a project".

All too often the selection of product changes so greatly throughout the build to the extent that material on the finished project does not reflect the original specification in terms of its ability to perform as intended. There needs to be an individual who is tasked with the sign-off of each stage in the process which is related to fire safety. This should include any deviation away from accepted and original signed-off specification.

### **Installation of product.**

All too often the standard of installation of fire doors along with its essential ironmongery means that the product is not fit for the purpose it is intended, i.e. to prohibit the passage of fire and smoke throughout a building and in doing so protect lives and offer protection to the remainder of the building and to other buildings. It is a fact that fire doors when properly installed and maintained do save lives, yet so often the poor-quality installation of them means they will not have a proper chance to work correctly in the event of a fire.

New initiatives such as BWF Certifire Certified [Fire Door Installer Register](#) which allows any installation company with the recognised certification from recognised bodies such as BM TRADA Certification, FIRAS or IFC to provide their details on a register are to be welcomed and should be heavily promoted by industry.

As fire doors are in themselves a life safety product then installation of these should be completed by a registered installer. This would be similar to the "Gas safe" scheme where under the Gas Safety (Installation and Use) Regulations 1998 for a gas engineering business to legally undertake gas work that is within the scope of the Regulations they must be on the [Gas Safe Register](#). It is the recommendation of the Guild of Architectural Ironmongers that a similar mandatory scheme to Gas Safe be adopted in to law for installation of fire doors.

## Product usage post-handover

This is the responsibility of the client/end-user. Unfortunately, all too frequently people are not aware of the responsibilities of looking after fire doors properly and ensuring these are maintained and inspected regularly. Frequently fire doors have items retro-fitted such as digital locks which will damage the integrity of the door without proper intumescent protection being used. Better awareness of the importance of fire doors and their associated architectural ironmongery must be given to the end-user.

To illustrate further, more precise information on fire doors and associated ironmongery must be handed across on building handover in line with the recommendations of Regulation 38 of the Building Regulations. This requires that: “The person carrying out the work shall give fire safety information to the responsible person not later than the date of completion of the work, or the date of occupation ... whichever is earlier.”

It should also be noted that any changes made to a fire door and its essential ironmongery post-handover can have a marked impact on the fire safety strategy of the building therefore extreme care must be taken.

## Inspection of product

This is the responsibility of the client/end-user and the designated “responsible person”. Many of these people do not realise the importance of inspecting and maintaining fire doors together with their appropriate essential ironmongery.

In the UK inspection of fire doors is not mandatory yet it is a requirement in several countries and regional administrations overseas (such as USA) that fire doors be inspected and re-stamped or labelled on a six month (high risk buildings) or annual basis. In fact, under the Australian Standard AS 1851 “Maintenance of Fire Protection Systems and Equipment” not having regular inspection of fire doors attract penalties for non-compliance.

The lack of evidence as to when a fire door has been inspected is also concerning – it is evident when a fire extinguisher has been inspected which gives confidence in its usage, the same applies with electrical items with Portable Appliance (PAT) Testing. Is a fire door with associated ironmongery no less of a life safety product than a fire extinguisher?

There are schemes in existence including the [Fire Door Inspection scheme](#) which provides online training such as the [DipFD](#) which is a Diploma giving product knowledge on Fire Doors as well as [CertFDI](#) which is a training course for Certificated Fire Door Inspectors. A CertFDI allows the inspector to carry out on-site inspections of installed fire doors and ironmongery in existing or new buildings having been independently assessed and re-assessed to do so on a three-year basis.

Whilst the Fire Door Inspection Scheme is available it is not as widely used as should reasonably be expected, bearing in mind the amount of fire doors in use across the UK. It is a sad fact that many fire doors in use are not fit for purpose. To further demonstrate this the Fire Door Inspection Scheme conducted a [survey](#) in 2015 of 672 doors across 31 sites and identified over two and a half thousand faults.

The survey found the following:

- 61% of doors had their fire or smoke seals either missing, installed incorrectly or not fitting the perimeter gaps correctly.

- 34% of doors had gaps in excess of the recommended 3mm gaps between the door and its frame (as specified in BS9999:2008 and BS8214:2008).
- Almost one in six had significant damage to door leaves.
- Over a third had incorrect fire door signage – which is a mandatory requirement under Approved Document B.
- Almost 1 in 5 had unsuitable hinges.

It is the recommendation of the Guild of Architectural Ironmongers (GAI) that fire door inspection be mandatory in UK in similar fashion to USA and Australia.

### **Maintenance of product**

Maintenance of product is a requirement under the Regulatory Reform (Fire Safety) order as critical items should be maintained at regular intervals as mentioned in the following quotation:

“Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices...are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.”

It is often a condition of warranty that product be maintained on a regular basis by a suitable specialist as a prerequisite in satisfying the correct usage requirement. Manufacturers frequently provide information and recommendations on correct practice of maintenance and warn that a failure to maintain the product may result in the non-detection or late detection of foreseeable or already existing malfunctions.

Despite this, in the same way that fire doors and associated ironmongery are not inspected they are frequently not maintained. This can result in essential items of hardware such as door closers not functioning correctly and not being able to close the door from any angle over any latch (as per Approved Document B) or hinges not functioning properly which could result in the door dragging on the floor and therefore not being able to close properly in to its frame. Incorrectly functioning ironmongery on a door can and will hamper a fire door from performing its role as intended. This can lead to the consequence of lost lives and damage to property.

More awareness of the importance of maintenance of ironmongery on fire doors must be highlighted to the end-user /client and responsible person – particularly at the handover stage of a building.

## QUESTION 3

**Does the current system place a clear over-arching responsibility on named parties for maintaining/ ensuring fire safety requirements are met in a high-rise multi occupancy building? Where could this be made clearer? What would be the benefits of doing so?**

The current system seems to be unclear with the role and responsibilities of users seldom explained to them or indeed understood by them.

Anecdotal evidence from our members shows that those with this responsibility are often unaware of the burden of responsibility they have. One of our members states as follows:

“I cannot directly comment where high-rise buildings are concerned as Cornwall does not tend to have such buildings, but if the looks of shock on the faces of responsible people from projects I have worked on are anything to go by, I'd say that few people on the ground realise the burden they carry until something goes wrong, or someone like me points it out. It should be a legal requirement for landlords and their agents to be fully versed in what is required of them at the point of handover, or before if at all possible. When it comes down to it I do not believe that the task ahead of a responsible person is too onerous for a qualification to be designed and enforced for those who are ultimately responsible for not only the building, but the lives of those who live in it.

Another respondent gave this answer:

“I believe a form of responsible person's qualification for high rise buildings and multiple occupancy would be in order. Those in such positions should also have access to documentation stating exactly where all building materials and hardware came from which also details who they should go to for advice in maintaining ironmongery, fire doors etc. For example - letting them know that fire door inspections must be carried out by a representative of FDIS (for example) or what qualification a person should hold in order to advise on matters of fire door and hardware. Perhaps a government database could be created listing every person / business employing someone who holds a particular qualification.”

Another suggestion is that the person responsible for fire should be named on the Health and Safety poster or another more specific poster with a contact number giving the realistic times for when a person will answer.

A survey conducted for [Fire Door Safety Week](#) – a national annual campaign highlighting the importance of fire doors has shown that 59% of tenants surveyed do not know who they should be contacting to report fire safety concerns about the building where they live. For further information click [here](#).

As stated by the British Woodworking Federation (BWF) “The responsible person should not be a mystery person lurking in the shadows, but must be front and centre so that people know where to take their problems.”

To highlight this further a [poster](#) has been designed and is available to detail the name and number of the responsible person for the location.

To summarise – more training and awareness of responsibilities of the responsible person needs to be made available. In addition – people need to know who the responsible person is and how to contact them.

# Competencies of key players

## QUESTION 4

What evidence is there that those (3) with responsibility for:

- **Demonstrating compliance (with building regulations, housing & fire safety requirements) at various stages in the life cycle of a building;**
- **Assessing compliance with those requirements are appropriately trained and accredited and are adequately resourced to perform their role effectively (including whether there are enough qualified professionals in each key area)? If gaps exist how can they be addressed and what would be the benefits of doing so? 3 For example, architects, those with responsibility for installing products, those undertaking Building Control sign-off or fire protection and enforcement work**

### Generally

The key issue raised by GAI membership is a lack of awareness in matters relating to the specification of architectural ironmongery. As previously detailed in question 2 qualified architectural ironmongers spend years being trained in product knowledge, standards and legislation as well as the ability to specify the correct product for each application. The [DipGAI](#) course can last up to 3 years.

Continuing Professional Development leading to the [Registered Architectural Ironmonger \(RegAI\)](#) qualification is also available to qualified architectural ironmongers as an ongoing process whereby CPD points must be earned each and every year.

In spite of this specifications are still being provided by people who are not properly trained to do so. Many of our members feel it should be mandatory for a detailed ironmongery specification to be completed by a DipGAI or RegAI holder. This would show compliance with [Approved Document 7](#) in that the specification would be of “materials of a suitable nature and quality in relation to the purposes and conditions of use”

Also – as previously mentioned the Fire Door Inspection Scheme provide training on Fire Doors as well as the ability to inspect them. Utilising a qualified fire door inspector would also help satisfy the requirements for ongoing maintenance of product under the Regulatory Reform (Fire Safety) Order.

### Architects

Any architect or technician who uses a qualified architectural ironmonger does clearly demonstrate their intent in demonstrating compliance with the relevant regulations. Training of architects using online courses such as the [GAI Foundation in Hardware](#) or the [Fire Door Inspection Scheme Diploma in Fire Doors](#) should also be actively encouraged.

Unfortunately, the good works completed at specification stage are often undermined further down the line in the construction process. As one GAI members states “Architects will take advice from Architectural Ironmongers at scheduling time but specifications are often broken in the name of economy by a contractor saying- this is the same can we use this please without giving the evidence. The architect often feels pressured to accept the alternative.”

## **Installers**

We would refer the reader to the section “installation of product” in Question 2 for detailed analysis but it is unfortunately true that many installers of ironmongery on to fire doors are not qualified to do so. A compulsory scheme similar to Gas Safe should be mandatory for installation of fire doors.

## **Building Control Sign off**

Again, there is a lack of knowledge and unfortunately the current process for approval of a building from design to handover results in very little assignment of responsibility for approving critical fire safety decisions. This includes sign-off of installed ironmongery product on site and as to whether it truly is “fit for purpose”. As stated earlier key individuals should be held responsible for sign off of each stage in the process which relates to fire safety.

We would recommend that there should be a complete review of the sign off process with the introduction of mandatory sign off procedure which is similar to the [Building Control Amendment Regulations 2014 \(BCAR\)](#) in the Republic of Ireland. These regulations require the nomination of a competent ‘Assigned Certifier’ to inspect and certify the works, the assignment of a competent builder to carry out the works and the submission of Certificates of Compliance on completion. The people who are then responsible under law, for compliance with Building Regulations and Building Control Regulations include the owner of the building, the designer who designs the works, and the builder who carries out the works.

As one GAI member states. “I have personally been involved in the supply of projects in to the Republic of Ireland both prior to and after the introduction of BCAR and the change in approach to specification and supply was huge. Previously there was a huge reliance on the quantity surveyor and cost was of primary importance. Post BCAR the architect was insistent on technical submittals on each item of ironmongery and would not consider any change in specification unless they were sure there would be no compromise in quality or fitness for purpose. Their role as “assigned certifier” with legal responsibility for sign off ensured that the quality and integrity of specification was held”.

## **Fire-protection and Enforcement**

Enforcement agencies such as fire service and building control and their roles have been previously examined in this document. The recommendation of the Guild of Architectural Ironmongers is a change in policy with fire and rescue service taking more responsibility of fire safety of building under amendment to Regulatory Reform (Fire Safety) Order as well as looking to change the role of Building Control Officers with sign off being carried out in similar fashion to Republic of Ireland under BCAR.

Another approach would be to make any changes to Approved Document B which would allow prescriptive rather than non-prescriptive guidance. The February 2017 [survey](#) commissioned by DCLG on proposed changes to ADB previously mentioned in question 1 states “Those in favour of prescriptive guidance believe it will increase certainty about compliance. It will make the criteria for the decisions of building control officers and approved inspectors transparent. It should mean fewer disagreements between Building Control and those seeking to comply.”

# Enforcement & Sanctions

## QUESTION 5

**Is the current checking and inspection regime adequately backed up through enforcement and sanctions?**

**In particular**

- **Where does the regime already adequately drive compliance or ensure remedial action is always taken in a timely manner where needed?**
- **Where does the system fail to do so? Are changes required to address this and what would be the benefits of doing so?**

The current vehicle which is available for enforcement and non-compliance is Trading Standards and unfortunately the architectural ironmongery industry has little faith or confidence in this as a means of being able to resolve issues.

One member has stated the following:

“The current regime is not enforced, rarely are non-compliance issues enforced and addressed particularly in respect of locks on doors and their impact on the fire compartmentation or the ability to escape. The enforcement officers have little understanding of door hardware and the current requirements and do not understand the implications of fitting incorrect solutions. I firmly believe that the only way to address this is that anyone who carries out work on a fire door must have a minimum level of competency and be licensed to carry out work on a fire door. Limiting work on fire doors to only be carried out by competent persons would reduce the risk of non-compliance and the work required by the enforcement authority to enforce.”

Enforcement would be easier if there was a change to sign off of buildings as previously mentioned if there was a change similar to sign off being carried out in similar fashion to Republic of Ireland under BCAR. There would then be individuals with legal responsibility for sign off.

Another means of ensuring compliance would be to reinstate the position of the Clerk of Works on site. The role of inspecting the workmanship, quality and safety of work on site and then reporting findings to the client has largely been lost and this results in many errors in installation which would have been caught on site now being passed. One example of this highlighted by a member is “There are lots of building with intumescent strip in the doors but none under the hinges because it is not checked” a better regime of inspecting installation on site by a trained professional who is aware of many of the regulations and standards as well as their application would eliminate many of the current gaps in fire safety.



# Tenants' & Residents' Voice in the current system

## QUESTION 6

**Is there an effective means for tenants and other residents to raise concerns about the fire safety of their buildings and to receive feedback? Where might changes be required to ensure tenants'/residents' voices on fire safety can be heard in the future?**

There should be a better means of tenants and other building occupiers to raise (anonymously if necessary) issues with their buildings fire safety measures.

A central register that people can raise issues on which auto notifies the responsible person that an issue has been raised should be available. This will require a register of ALL designated Responsible Persons for all buildings covered by the legislation. This could be enforced as part of the planning and building control process for new or refurbished buildings

There should also be a clear and transparent mechanism that tenants can contact the local authority/ building control to report concerns

Also, as stated earlier in question 3 there is little awareness by many of who the responsible person is and it should be mandatory that people are made aware of this through posters.

# Quality Assurance and Testing of Materials

## QUESTION 7

**Does the way building components are safety checked, certified and marketed in relation to building regulations requirements need to change?**

**In particular:**

- **Where is the system sufficiently robust and reliable in maximising fire safety and, if appropriate**
- **Where specifically do you think there are weaknesses/gaps?**

**What changes would be necessary to address these and what would be the benefits of doing so?**

It is the recommendation of the Guild of Architectural Ironmongers (GAI) that third party certification of fire safety products should be mandatory.

Approved Document B currently supports the use of third party accreditation schemes stating they “not only provide a means of identifying materials and designs of systems, products or structures which have demonstrated that they have the requisite performance in fire, but additionally provide confidence that the systems, materials, products or structures actually supplied are provided to the same specification or design as that tested/assessed.”

ADB also states that it currently “may accept the certification of products...under such schemes as evidence of compliance with the relevant standard”. If Building Control already have such confidence then would it not be a natural progression to make such certification in life safety products mandatory?

Existing third-party certification schemes are currently widely used in the architectural ironmongery scheme including:

- [Certifire](#) scheme for fire protection products.
- [BSI Kitemark](#) scheme for security products.

# Differentiation within the current Regulatory System

## QUESTION 8

**What would be the advantages/disadvantages of creating a greater degree of differentiation in the regulatory system between high-rise multi occupancy residential buildings and other less complex types of residential/non-residential buildings (4)? For example in terms of higher competency requirements, pro-activity/frequency of safety sign-off**

**Where specifically do you think further differentiation might assist in ensuring adequate fire safety and what would be the benefits of such changes?**

There were two schools of thought from Guild of Architectural Ironmongery (GAI) membership in answering this question:

### **In favour of differentiation between high rise and other buildings**

One member states “As certain doors within a high rise will endure a much higher rate of use, and such buildings hold such a large number of people with need of safe egress in case of emergency, I think it only right and proper that they are inspected more frequently and that a more proactive approach is taken. I believe that inspections should be undertaken highly regularly as a matter of course and that residents are empowered to self-report issues to a responsible person who is legally bound to respond in a timely fashion, based on what it is that has been reported. I also believe that residents should have recourse to an independent body if such reports are ignored, so that investigations into the conduct of responsible persons can be launched BEFORE a tragedy is allowed to unfold. Higher levels of competency are not unreasonable to expect as the challenges for egress, compartmentalisation etc presented by a high-rise building are somewhat unique. “

Another respondent states “it would save lives. It would make companies and authorities ensure requirements are met. Any legislation would have to be carefully written, if block ten storeys high is the cut-off point everyone will build nine storey blocks.”

Another agrees “Definitely an advantage of creating a two- tier system purely on the basis of the risk benefit. Commercial buildings tend to be better regulated and generally staff will escape and react to fire alarms to egress the buildings”.

### **Not in favour of differentiation**

The other school of thought comes with those who think that this would not be a sensible proposition.

One writes “This is fire safety and human life and all buildings should comply with the best system possible regardless of the building type.”

Another goes further to state: “No matter what the building type the standards / regulations implemented should always aim for the highest levels of fire safety / protection – there would be no real benefit in creating a differentiation since no matter what the building type, the end goal should always be the same; to ensure that the building and its occupants are suitably protected in the event of a fire. It is not building differentiation that should be altered but the industries compliance to the regulations should be monitored and enforced which would ensure optimum safety.”

On reflection, whilst there are indeed valid arguments put forward for both differentiation and non-differentiation surely the goal must be to ensure we have the best possible systems in respect of fire safety for all types of building, whatever their usage. This should be our clear goal.

# International Comparisons and Other Sectors

## QUESTION 9

**What examples exist from outside England of good practice in regulatory systems that aim to ensure fire safety in similar buildings? What aspects should be specifically considered and why?**

I have already mentioned a number of good practice internationally throughout this document but will summarise as below:

- Republic of Ireland – Ireland has a mandatory sign off procedure in [Building Control Amendment Regulations 2014 \(BCAR\)](#). These regulations require the nomination of a competent ‘Assigned Certifier’ to inspect and certify the works, the assignment of a competent builder to carry out the works and the submission of Certificates of Compliance on completion. The people who are then responsible under law, for compliance with Building Regulations and Building Control Regulations include the owner of the building, the designer who designs the works, and the builder who carries out the works. As previously stated this has caused a significant increase in the quality of specifications and a greater unwillingness to accept alternative specifications without detailed assurances and technical submittals. As one of our members from the Republic of Ireland states “The quality of product on completed buildings has increased substantially since the introduction of BCAR”
- USA - It is a requirement that fire doors be inspected and re-stamped or labelled on a six month (high risk buildings) or annual basis. The effect of having a visible and up-to-date label shows good management and is reassuring for the users. For further detail click [here](#).
- Australia - As in USA fire doors must undergo regular inspection and failure to do so can result in heavy fines. It is also interesting to note that fire doors are mentioned in the same context as fire extinguishers, smoke alarms and monitoring systems as being seen as “fire protection equipment”. This is not how fire doors are seen in the UK. Please refer to [article](#) for further details. The inspection of fire doors should be mandatory in the UK in the same manner as it is in USA and Australia.

## QUESTION 10

**What examples of good practice from regulatory regimes in other industries/sectors that are dependent on high quality safety environments are there that we could learn from? What key lessons are there for enhancing fire safety? Reminder - Respondents should answer questions as broadly as possible and focus on making suggestions for future improvements as well as identifying areas that currently work well.**

I have mentioned other industries throughout this document and are summarised here:

- Gas industry under the Gas Safety (Installation and Use) Regulations 1998 for a gas engineering business to legally undertake gas work that is within the scope of the Regulations they must be on the Gas Safe Register. As fire doors are in themselves a life safety product then installation of these should be completed by a registered installer in the same manner.
- Fire extinguishers - it is evident when a fire extinguisher has been inspected which gives confidence in its usage. A fire door once inspected should be labelled in the same manner once inspected and this should be mandatory.
- Electrical industry Portable Appliance Testing (PAT) also requires labelling of product upon inspection – again inspected fire doors should also be labelled in this way.

## Twelve key recommendations of the Guild of Architectural Ironmongers:

1. There should be mandatory usage of fully qualified architectural ironmongers to compile an ironmongery specification.
2. A similar mandatory scheme to Gas Safe should be adopted in to law for installation of fire doors.
3. Fire door inspection should be mandatory in the UK in similar fashion to USA and Australia. Heavy fines should be levied for non-compliance.
4. Third party certification of fire safety products should be mandatory.
5. There needs to be an individual who is tasked with the sign-off of each stage in the process which is related to fire safety. This should include any deviation away from accepted and original signed-off specification.
6. There should be a complete review of the sign off process with the introduction of mandatory sign off procedure which is similar to the Building Control Amendment Regulations 2014 (BCAR) in the Republic of Ireland.
7. The role and position of the Clerk of Works on site should be re-introduced as a means of ensuring on site compliance in installation.
8. Approved Document B should be revised to remove ambiguities and be much clearer to understand.
9. Approved Documents in general should be written in such a way that the requirements of each one do not contradict another.
10. The Regulatory Reform (Fire Safety) Order 2005 should be amended to provide greater involvement of the fire service with regards to the sign-off of buildings
11. The responsible person should be named on the Health and Safety poster with a contact number giving the realistic times for when a person will answer.
12. A clear and transparent mechanism should be available which allows tenants to contact the responsible person/ local authority/ building control to report concerns on fire safety.

# Appendix A

## **Guild of Architectural Ironmongers UK Membership:**

3V Architectural Hardware Ltd

A C Leigh Ltd

Abus UK Ltd

Access2

Acorn Architectural Ironmongery Ltd

Aldridge Security Ltd

Allegion (UK) Ltd

Allgood Plc

Alpro Architectural Hardware

Aspex UK Ltd

Assa Abloy Security Solutions

Astra Door Controls Ltd

Astute Security Ltd

Barry Bros Security Devices

Beaver Architectural Ironmongery Ltd

Berkshire Fixings Ltd (BFL)

BJ Waller Ltd

Borg Locks Ltd

Boss Door Controls Limited

BPS DORLINE

Branch BMN Ltd

British Woodworking Federation

Broughtons of Leicester Ltd

Caldwell Wright & Co Ltd

Carlisle Brass Ltd

CBS (Midlands) Ltd



CES Security Solutions Ltd  
City Lock & Safe Ltd  
Coburn Sliding Systems Ltd  
Codelocks Ltd  
Cooke Brothers Ltd  
Cookson Hardware  
Cotswold Doors Ltd  
County Architectural Ironmongery Ltd  
Croft Architectural Hardware Ltd  
Croma Locksmiths and Security Solutions Ltd  
D & E Architectural Hardware Ltd  
D Line Eisenware Ltd  
DAD UK Ltd  
Davis Architectural Services Ltd  
Decco Ltd  
DJH Group Ltd  
Dockerills (Brighton) Ltd  
DOM-UK Ltd  
Doorfit Products Ltd  
Doras Hardware Ltd  
dormakaba  
Dorset Architectural Ironmongers Limited  
Drews Ltd  
e-Hardware  
Elite Architectural Ironmongery Ltd  
Em-B Solutions Ltd  
Eurobond Doors Ltd  
Exidor Limited  
Exova Warringtonfire  
F P Herting & Son Plc  
F R Scott Limited

Farmer Bros & J D Beardmore  
Forza Doors Ltd  
Franchi Plc  
Frank Allart & Co Ltd  
Freeman and Pardoe Engineering Ltd  
Frelan Hardware Ltd  
Frisco (UK) Sales Ltd  
Fullham Brass Ironmongery Ltd  
G Johns & Sons Ltd  
Gem Security Systems Ltd  
George Boyd Architectural Ironmongery  
GEZE UK Ltd  
Glutz UK Ltd  
Gretsch Unitas Ltd  
Guardian Lock & Engineering Co Ltd  
Hafele (UK) Ltd  
Hanson & Beards Ltd  
Harbrine Ltd  
Hardware Supply Co. (M'bro) Ltd  
Henry Squire & Sons Ltd  
HEWI (UK) Ltd  
HIPS Architectural Ironmongery Ltd  
HOPPE (UK) Ltd  
Howdens Joinery Co  
Ian Firth Hardware Ltd  
Instinct Hardware  
Intec Systems Ltd  
Intelligent Hardware Ltd  
IRM Bristol Limited  
Ironmongery Direct Ltd  
Ironmongery Innovations Ltd

Isaac Lord Ltd  
ize Ltd  
James Gibbons Format Ltd  
JEB Supplies Ltd  
John Monaghan (Holdings) Ltd  
Keyprint Security Ltd  
Kirby and Wells Ltd  
Laidlaw Limited  
Lincoln Security Ltd  
Lock-Tech  
Lorient Polyproducts Ltd  
M Marcus Ltd  
M P Smith & Co Ltd  
MacGregor Industrial Supplies  
Mackinnon & Bailey  
Macnaughton Blair Ltd  
Magpie Security Services Ltd  
Mann McGowan Fabrications Ltd  
Marches Architectural Hardware Ltd  
ME Duffells Ltd  
Mercia Hardware Ltd T/A Eagledale  
Mid Beds Locksmiths Ltd  
Miles Architectural Ironmongery Ltd  
Mitchells Ironmongers Ltd  
MLS Rail Ltd  
Nicholls & Clarke Building Materials Ltd  
Nico Manufacturing Ltd  
Norseal Limited  
Oxford Ironmongery Ltd  
Phoenix Sales (RJ) Ltd  
Poole Waite & Co Ltd

Powell Hardware  
Poyntell Limited  
Preece Burford Ltd  
Price & Oliver Ltd  
Project Hardware Ltd  
PWIDF LTD  
Raygar Architectural & Engineering Supplies td  
RB Architectural Hardware Ltd  
Robust UK Ltd  
Royde & Tucker Ltd  
RTR Services Ltd  
Safehinge Ltd  
SALTO SYSTEMS Ltd  
Samuel Heath & Sons plc  
SDS (London) Ltd  
Securefast plc  
Select Architectural Ironmongery Ltd  
Simonswerk UK Ltd  
Sitemaster Supplies Ltd  
Slingers 1858 Limited  
SLS (Contracts) Limited  
Spiller Architectural Ironmongery Ltd  
Strand Hardware Ltd  
Surelock McGill Ltd  
T&A Architectural Ironmongery Ltd  
T.I. Midwood & Co Ltd  
TBKS Architectural Ironmongery Ltd  
TGR Import & Export Ltd  
The Parkside Group T/a Axim  
Trapex Ltd  
Turentek Architectural Ironmongery Ltd

UAP Ltd

UL International (UK) Ltd

Universal Hardware Supplies Ltd,T/A Door Décor and

URFIC-INTER (UK) LIMITED

Viking Hardware Ltd

W T LYNN LTD

Walsall Locks Ltd

Weldit LLP

William Channon

Williams Ironmongery Ltd

Wyatt Crocker Ltd

Zero Seal Systems Ltd

Zoo Hardware Ltd

# Appendix B

## Bibliography

- Guild of Architectural Ironmongers [www.gai.org.uk](http://www.gai.org.uk)
- Approved Document B Volume 1 – Dwelling Houses : Fire Safety  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/485420/B\\_R\\_PDF\\_AD\\_B1\\_2013.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/485420/B_R_PDF_AD_B1_2013.pdf)
- Approved Document B Volume 2: - Buildings other than dwelling houses: Fire Safety  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/441669/B\\_R\\_PDF\\_AD\\_B2\\_2013.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/441669/B_R_PDF_AD_B2_2013.pdf)
- Approved Document 7 – Materials and Workmanship  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/443280/B\\_R\\_PDF\\_AD\\_R7\\_2013.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443280/B_R_PDF_AD_R7_2013.pdf)
- Regulation 38 of Building Regulations 2010  
<http://www.legislation.gov.uk/ukxi/2010/2214/regulation/38/made>
- British Standards Institution <https://www.bsigroup.com/en-GB/>
- Construction Products Regulation  
[https://ec.europa.eu/growth/sectors/construction/product-regulation\\_en](https://ec.europa.eu/growth/sectors/construction/product-regulation_en)
- The GAI / DHF Code of Practice for Hardware for Fire and Escape Doors  
<http://www.firecode.org.uk/>
- DCLG 2017 Research in to Approved Documents B and M  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/591028/Usability\\_Research\\_ADB\\_and\\_M.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/591028/Usability_Research_ADB_and_M.pdf)
- BWF Fire door installers register <http://www.bwfcertifire.org.uk/fire-door-safety/fire-door-installers-register>.
- Fire Door Inspection Scheme [www.fdis.co.uk](http://www.fdis.co.uk)
- Fire Door Inspection Scheme survey on fire doors <http://www.fdis.co.uk/2015/uk-fire-doors-are-not-up-to-the-job-according-to-fdis-research>
- Fire Door Safety Week survey <http://firedoorsafetyweek.co.uk/nations-poorest-greatest-risk-fire-warns-fire-door-safety-campaign/?article=true>
- Guild of Architectural Ironmongers DipGAI <http://www.gai.org.uk/iai/regai/industry-professionals>
- Guild of Architectural Ironmongers RegAI CPD . <http://www.gai.org.uk/iai/regai/industry-professionals>
- Certifire third party certification scheme for fire protection products  
<https://www.warringtoncertification.com/certifire.html>
- BSI Kitemark scheme for security products <https://www.bsigroup.com/en-GB/kitemark/product-testing/>
- Republic of Ireland Building Control Amendment Regulations 2014 (BCAR)  
<http://www.irishstatutebook.ie/eli/2014/si/9/made/en/print>
- USA inspection of fire doors <http://www.nfpa.org/news-and-research/publications/nfpa-journal/2017/september-october-2017/in-compliance/nfpa-101>
- Australian Inspection of fire doors <http://www.fcnational.com.au/as-1851-fire-safety/>