



## **The Guild of Architectural Ironmongers Response to Building a Safer Future Proposals for reform of the building safety regulatory system**

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## **Introduction**

This response to the Building a Safer Future Proposals for reform of the building safety regulatory system is the opinion of the architectural ironmongery industry through the [Guild of Architectural Ironmongers](#) (GAI).

This document will answer the relevant questions from the consultation from this industry perspective.

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.

**Q. 2.5. Do you agree that fire and rescue authorities should become statutory consultees for buildings in scope at the planning permission stage? If yes, how can we ensure that their views are adequately considered? If no, what alternative mechanism could be used to ensure that fire service access issues are considered before designs are finalised?**

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 and the fire and rescue authorities should become statutory consultees.

**Q. 2.12. Do you agree that the information at paragraph 89 is the right information to require as part of gateway two? Please support your view.**

Paragraph 89 details the following documentation:

“a. Full Plans produced by the principal designer - detailed plans/specification of building works in respect of fire and structural safety and how these risks are being managed alongside the necessary specification in all other aspects of the building regulations;”

This totally ignores any changes that may come about throughout the value engineering processes that take place between the design and the construction phases. Architects will take advice from Architectural Ironmongers to create specifications for building hardware, however these are often changed in the name of “economy” by a contractor. This so called “value-engineering” is, unfortunately, endemic throughout the construction process.

In the Final report of the Building a Safer Future Report (Summary 2.1) it makes specific reference to this common practice of value engineering in the Construction Process. This is defined in the report as follows: “Value engineering is a systematic and organised approach to providing the necessary functions in a project at the lowest cost. Value engineering promotes the substitution of materials and methods with less expensive alternatives” It goes on to state that this practice “can often result in uncontrolled, undocumented and poorly designed changes being made to the original design intent.”

This practice which could be better controlled through a “statutory change control process” as described in the Final Report does not appear to have been picked up specifically in the Government Response.

Paragraph 100 details as follows:

“We propose that the Principal Contractor should therefore be required to consult the Client and Principal Designer before deviating from original full plans to ensure safety is not inadvertently compromised. If the Client and Principal Designer are content with the recommended changes, we

propose that the principal contractor must notify the regulator of any proposed major changes, for example, structural or fire safety related measures, and submit further details (if requested by the building safety regulator) for approval before carrying out the relevant work. We also propose that they should separately record any other minor changes as part of their Construction Control Plan.”

It could be argued changes in specification could be included within the process in paragraph 100 but there is a danger that substitution of specified product which can have an impact on fire safety such as architectural ironmongery may not be picked up as part of this. GAI are most concerned that potential value engineering of a specification which has been prepared by a qualified architectural ironmonger could have severe fire safety consequences and the change control process recommended in Hackett report should therefore be adopted.

**Q. 2.21. Do you agree that the Principal Contractor should be required to consult the Client and Principal Designer on changes to plans?**

As an industry it is felt that it is extremely necessary to discuss changes to specifications during construction. We would like to reiterate that seemingly small changes to the ironmongery can have massive implications to fire performance and long-term performance/durability of the products.

**Q. 2.23. What definitions could we use for major or minor changes?**

Paragraph 101 details the following:

- Any design change that would impact on the fire strategy or structural design of the building;
- Changes in use, for all or part of the building;
- Changes in the number of storeys, number of units, or number of staircase cores (including provision of fire-fighting lifts);
- Changes to the lines of fire compartmentation (or to the construction used to achieve fire compartmentation);
- Variations from the design standards being used;
- Changes to the active/passive fire systems in the building;

We are in agreement with the above list being described as major changes but would also add the following as per our previous answer to questions 2.12 and 2.21.

- Changes in specification on product with fire and life safety implications.

**Q. 3.2. Do you agree with our proposed content for safety cases? If not, what other information should be included in the safety case?**

It states in the safety case “Evidence gained through regular inspection, reviews and maintenance of the building;” One of the most critical elements of fire safety in a building is a fire door. It is a fact that many fire doors are neither regularly inspected nor maintained.

Whilst the GAI initially proposed in the Call for Evidence that the inspection and maintenance of fire doors should be mandatory under Building Regulations (as is the case in Australia and USA), the

Hackitt Report did not go as far as this. It did, however state that “for all residents and for landlords of properties in HRRBs, their obligations extend to ensuring that fire compartmentation from the inside of a flat, including the front doors, is maintained to a suitable standard.” Whilst our preference would have been for mandating fire door inspection and maintenance, and enshrining it in building regulation, the GAI felt this was a step in the right direction and the GAI strongly recommends regular inspection and maintenance of this vital element of passive fire protection in a building.

GAI find it unfortunate to note that the Government proposal document does not appear to have featured this recommendation and would be keen to see this rectified.

**Q. 4.1. Should the Government mandate Building Information Modelling (BIM) standards for any of the following types and stages of buildings in scope of the new system?**

- a. New buildings in the design and construction stage, please support your view.**
- b. New buildings in the occupation stage, please support your view.**
- c. Existing buildings in the occupation stage, please support your view.**

The Hackitt Review recommends that for new builds, a Building Information Modelling (BIM) approach should be phased in. The GAI have been highly vocal in its support of BIM to its membership and have provided 35 BIM product data templates to its members so they can provide Product Data Sheets to deliver their product information in a structured manner to architects and contractors. Many GAI member companies have also invested heavily in providing BIM objects for usage in projects.

BIM standards by nature lend themselves more easily to new build projects rather than existing buildings, therefore we feel that scopes A and B would be easier to mandate.

**Q. 4.3. Are there other areas of information that should be included in the key dataset in order to ensure its purpose is met? Please support your view.**

Paragraph 202 includes the following information which could be included as a dataset: “Minimal information (e.g. quantity and location) on safety-related features (e.g. fire doors, sprinkler systems). Identification of which products should be included in the dataset will be based on the individual physical layers of protection that each form part of an integrated safety strategy for the building;”

It is pleasing to see fire doors mentioned in this section however, this should also include relevant door hardware/ironmongery as these are critical elements of a fire door. Incorrect specification/supply can have a marked impact on the function of the door itself as previously mentioned.

**Q. 4.13 Do you agree that mandatory occurrence reporting should be based on the categories of fire and structural safety concern reports identified in the prescriptive list in paragraph 222? Please support your view.**

We agree that mandatory occurrence reporting should indeed be based on the provided categories however we would caution that fire doors tend not to fail in use as they rely on the ironmongery components which are mechanically active during the day to day use of the building. It is generally these products on a fire door which usually wear out as opposed to the door itself.

**Q. 7.1 Government agrees with the Competence Steering Group's recommendations for an overarching competence framework, formalised as part of a suite of national standards (e.g. British Standard or PAS). Do you agree with this proposal? Please support your view**

GAI are represented on Industry Response Working Group 12 (Products) chaired by Construction Products Association (CPA) and have been greatly involved in the creation of a proposed matrix which will help detail core competencies across construction. The creation of competency standards either as BS or PAS would be of great benefit to industry to support the matrix. BS and PAS standards are indeed seen as best practice in industry and would have the effect of driving competency levels up in order to meet these standards.

Any increased emphasis on competence in industry is most welcome by our industry – The GAI's education portfolio has been developed over 50 years and is the only recognised programme in the world that leads to a qualification in architectural ironmongery to British and European standards. This is in the form of its highly respected [DipGAI](#) Diploma course as well as the [RegAI](#) CPD scheme which demonstrates commitment to continuing professional development. The GAI also provides timely technical updates to its membership on relevant product standards, codes of practice, building regulations and fire related safety.

Architectural Ironmongery Industry view is that there is a clear requirement for specifications to be undertaken by qualified ironmongers, installations to be undertaken by qualified personnel and inspections and maintenance undertaken by qualified personnel/companies. Competence is key across all these areas when it comes to ironmongery, particularly for fire and escape doors.

**Q. 7.2. Government agrees with the Competence Steering Group's recommendations for establishing an industry-led committee to drive competence. Do you agree with this proposal? Please support your view.**

We would be in agreement with an industry-led committee to increase levels of competence. Those who are best placed to help drive up industry standards are those who are experienced in the industry themselves. Therefore, a combination of relevant industry bodies (including Trade Associations), independent experts, building owners and residents would be a good mixture of personnel within these committees.

**Q. 8.1. Do you agree with the approach of an ‘inventory list’ to identify relevant construction products to be captured by the proposed new regulatory regime? Please support your view.**

Firstly, it is pleasing to see the statement that “products with an EU harmonised standard will continue to be regulated through the requirements set out in UK Construction Products Regulation 2013”. Many ironmongery/hardware products have been CE marked for more than a decade, this does give, at least a basic level of confidence about the products suitability and performance/durability, although it is not a quality mark itself.

That said there are many products which are not covered under the scope of a harmonised standard which can be seen as life-safety critical and these should also be covered within the inventory list – please see answer to question 8.3 for these standards.

**Q. 8.2. Do you agree that an ‘inventory list’ should begin with including those construction products with standards advised in Approved Documents? Please support your view.**

Yes, this would be a good starting point but there are key standards which are not included within the Approved Documents which should be there in respect of the ironmongery industry and this includes a number of harmonised European Standards, again please refer to answer to question 8.3.

**Q. 8.3. Are there any other specific construction products that should be included in the ‘inventory list’? Please list.**

The following Harmonised standards, (in addition to those listed in Approved Document B) should be considered:

- BS EN 1935 Single Axis Hinges
- BS EN 1154 Controlled door closing devices
- BS EN 1158 Door co-ordinator devices
- BS EN 12209 Mechanically Operated locks and locking plates
- BS EN 14846 Electromechanically operated locks and striking plates
- BS EN 179 Emergency exit devices operated by a lever handle or push pad, for use on escape routes

The following standards, which are not Harmonised Standards should also be considered:

- BS EN 1906 lever handles and knob furniture
- BS EN 1303 Cylinders for locks

**Q. 8.4. Do you agree with the proposed approach to requirements for construction products caught within the new regulatory regime? Please support your view.**

The proposed approaches laid down as below would be welcomed by the ironmongery industry:

- Clear labelling including a unique identifier that enables traceability and access to information on maintenance. Some parts of the construction industry are already using technology (smart labels) to achieve this and continued collaborative investment by the industry will improve the quality,

standards, and accessibility of this critical information. – we are in agreement with having clear labelling for the reasons you have stated.

- **Declarations of Performance.** These are mandatory for products which fall under the scope of a harmonised European Standards and are of material use in the ironmongery industry as so many products fall under harmonised standards. It would be most worthwhile to have performances declared for products which fall outside the scopes too.
- **Have in place systems to ensure that the products they manufacture consistently meet the claimed performance standard.** This may require an established test methodology with associated standard and could be demonstrated through industry or Government recognised third-party assurance. – The Hackitt Final report states “Manufacturers of construction products used in buildings where performance standards apply should ensure that products are retested at regular periods (at least every three years). They should also ensure that this testing is verified by an independent third-party certification body.” The GAI are in agreement with this and are highly supportive of mandatory third-party testing of products which are related to fire safety through third party schemes such as BWF Certifire.

**Q. 8.6. Do you agree with the proposed functions of a national regulator for construction products? Please support your view.**

A national regulator for construction products is in great need. This would be most useful to have an informed and well-resourced body to which manufacturers who make false declarations in respect of their products can be reported.

**Q. 8.9. Do you agree with the powers and duties set out in paragraph 350 to be taken forward by a national regulator for construction products? Please support your view.**

Having the national regulator with the necessary powers to act legally would be a necessity against all major standards, not purely those which are harmonised. There are many standards which are vitally important but have not yet been harmonised due to the length of time it can take at CEN level for this to happen.

**Q. 8.12. Do you agree with the proposal for the recognition of third-party certification schemes in building regulations? Please support your view.**

As stated in answer to question 8.4 third party certification schemes are seen as vitally important in the ironmongery and also the fire door industry. It is estimated that the BWF Certifire scheme now represents over 75% of doors sold in the UK. Many door hardware manufacturers provide third party certification through Certifire for ironmongery products also. This third party certification provides confidence in the products selected for specification.

## **Further comment from GAI**

In addition to the responses given to the questions above the GAI would also like to make the following points:

### **Importance of fire doors.**

One of the over-arching messages passed on by the GAI through its members' recommendations is to reinforce the message that fire doors are in themselves a "life safety product". It is pleasing to the GAI that strong emphasis on fire doors is made in the report and the Government response. The GAI is a strong advocate of ensuring that fire doors are properly specified, inspected and maintained as well as fitted with all appropriate, correct and compliant ironmongery. It should also be noted that most fire doors are required to perform many other duties for years before they have to act as a satisfactory fire door, this can include security, weatherproofing and even acoustic performance.

It should also be noted that there is more than one route to market for fire doors. These can be supplied as a doorset, wherein they are supplied complete with all ironmongery, glass and seals from one single source, or they can be supplied as a door assembly whereby the constituent parts can be sourced from different manufacturers and assembled on site. Both routes to market are valid in the eyes of the GAI.

**Higher commitment to continuous improvement to standards and test procedures.** The GAI have long been an intrinsic part of standards-making, both at BS and EN level and welcome the recommendation of increased commitment to industry with this process.

### **Greater clarity of Approved Documents**

GAI are in agreement that Approved Documents should be reviewed and rewritten - The GAI also recommend that Approved Documents in general should be written in such a way that the requirements of each one do not contradict another.

### **Clerk of Works.**

The Hackitt Final Report has stated that "more clients may seek to utilise a Clerk of Works type role to act as their eyes and ears throughout the construction process". This was one of the key recommendations of GAI at the call for evidence, noting that "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." Encouragement of clients to use a Clerk of Works was seen by the GAI as a step in the right direction in the Hackitt Report with the GAI view that this would support higher quality installation across the board. It is disappointing that this issue has not been mentioned in the Government Response

**END**