IRONMONGERY MANUFACTURERS' GUIDANCE DOCUMENT

This document is a work of collaborative industry effort and intended for those placing fire door hardware items on the market, particularly for use with timber fire resistant door systems.

It recommends product information which should be provided by manufacturers to consumers, based on best practice guidance.

Note that products which fall inside the scope of harmonised/ designated standards are not within scope of this document.

GAI and DHF acknowledges the constructive engagement of the Office for Product Safety and Standards in the development of this best practice guide.

1 INTRODUCTION AND SCOPE

Foreword

We acknowledge the constructive engagement of the Office for Product Safety and Standards in the development of this best practice guide.

"I welcome engagement with OPSS from both the Guild of Architectural Ironmongers and the Door & Hardware Federation aimed at supporting businesses in understanding and meeting regulatory requirements.

Businesses must comply with the regulations that apply to them, and industry-led initiatives such as this best practice guide can help them achieve this in a practical and effective way".

Duncan Johnson
Office for Product Safety and Standards (OPSS)
Deputy Director
Construction Products Regulation

Introduction

Fire doors are complex products. The specification, selection and fitting of appropriate and compatible hardware items is critical to performance in a fire emergency. This guidance document is intended for those placing fire door hardware items on the market, which can also be used by consumers, particularly for use with timber fire resistant door systems. (Note that a product is placed on the market when it is first made available for distribution, consumption or use on the market as part of a commercial activity. This can be in return for payment or free of charge.) This might include hardware manufacturers and merchant trade or distributors when they apply their own branding to the product.

This document is a work of collaborative industry effort and recommends product information which should be provided by manufacturers, based on best practice guidance. The product information can in turn assist stakeholders, which may include consumers, to make informed decisions regarding the compatibility and safe use of hardware components within a fire door system.

It is important that the decision regarding suitability of components fitted onto a fire door be made by a suitably competent individual.

The selection of some components may have an impact upon other performance characteristics within a fire door such as security, smoke, acoustics, energy performance or weather tightness. It is also necessary to understand and communicate the intended use or context in which the product is to be used.

1 INTRODUCTION AND SCOPE

Provision of this information may assist manufacturers in meeting their obligations under the General Product Safety Regulation 2005. In all cases, the user of this guidance should be aware of their legal and regulatory responsibilities and accountability.

The types of hardware that the guidance within this document considers are in three categories. Please see table 1 (below) for further detail as to what information should be provided for each category of product.

This document relates to products placed on the market in Great Britain. For products placed on the market in Northern Ireland and the EU, relevant regulation in this territory must be considered.

Note that differing General Product Safety Regulations are applicable in both Great Britain and in Northern Ireland, with some variation between the two and reference should be made to either, depending on where the product is placed on the market. The application of the Northern Ireland Protocol and Windsor Framework does impact on the responsibilities of both producers and distributors in Northern Ireland.

All door hardware when used on fire doors is subject to coverage by the chosen door's tested, assessed or certificated scope. This generally identifies the types of hardware approved, the required specification/design based on the key materials/maximum size and the application of any additional intumescent protection. On this basis approval should be sought from the specific door supplier to ensure compliance based on this assessed/certificated scope.

Note that products which fall inside the scope of harmonised/designated standards are not within scope of this document.

Category	Description of Category	Examples of products
1	Products that require a significant amount of material removed through the entire door leaf or frame during installation	Letterplates, air transfer grilles, cat flaps
2	Products that require a smaller amount of material to be removed from the door leaf or frames	Drop-down seals, morticed door bolts, recessed push plates or kick plates, some door cameras, door viewers
3	Products requiring minimal material removal or which are face fixed	Handles, knockers, numerals, security chains, face fixed push plates or kick plates, face fixed door bolts, finger guards
Note that the level of risk to a fire door increases in relation to the volume of material removed, the location and whether it penetrates the full thickness of the door or frame.		

Table 1 – Summary of categories of product

2 DEFINITIONS

Definition of a doorset

Source: Approved Document B Volume 2: Buildings other than dwellings: Appendix C.

It should be noted for the purposes of this document we refer to a door system which would include a door set or door assembly in accordance with definitions of a doorset taken as below from Approved Document B Volume 2: Buildings other than dwellings: Appendix C.

Fire doorset: A door or shutter which, together with its frame and furniture as installed in a building, is intended (when closed) to resist the spread of fire and/or gaseous products of combustion and meets specified performance criteria to those ends.

NOTE: A fire doorset may have one or more leaves. The term includes a cover or other form of protection to an opening in a fire resisting wall or floor, or in a structure that surrounds a protected shaft. A fire doorset is a complete door assembly, assembled on site or delivered as a completed assembly, consisting of the door frame, leaf or leaves, essential hardware, edge seals and glazing, and any integral side panels or fanlight panels in an associated door screen.

Definition of a safe product

Source: General Product Safety Regulations 2005.

Before placing a product on the market the producer must ensure that it is a safe product, i.e. one which under normal or reasonably foreseeable conditions of use does not present any risks or only the minimum risks compatible with the product's use, considered to be acceptable and consistent with a high level of protection of health and safety.

Please note that although the vast majority of products placed on the UK market are safe, proactive measures and preparation are essential in the mitigation of product safety challenges and the undertaking of corrective actions. Users of this document should familiarise themselves with the standard entitled PAS 7050:2022 Bringing safe products to the market – Code of practice which is available from the British Standards Institution. This standard aims to support businesses and regulators in complying with their relevant legal duties relating to placing safe products on the market. This provides a set of recommendations, guidelines and examples of good practice, with a particular focus on the preparation of a product safety management plan (PSMP).

Many products can comply with British or European standards, but this does not automatically mean that they are safe within the above definition. This is because standards are written to standardise different features of a product, which might include, for example, its dimensions, its efficiency and its durability as well as its safety. Before using compliance with a standard as evidence of safety, it will be necessary to check that the standard covers all the relevant characteristics.

2 DEFINITIONS

Definition of third party certification of product

The definition of third party certification of product is where the product is tested or assessed by an independent organisation or body. They are independent because they are not affiliated with the producer nor the user of the item being tested; no commercial bias is present.

Definition of placing products on the market

Source: Placing manufactured products on the market in Great Britain (www.gov.uk).

A product is placed on the market when it is first made available for distribution, consumption or use on the market as part of a commercial activity. This can be in return for payment or free of charge. This happens after a product has been fully manufactured. A product is placed on the market when an offer or agreement is made for the transfer of ownership, possession or any other property right. Placing on the market can take place before the physical transfer of a product. It does not necessarily require the physical handover of a product.

Definition of distributor

The definition of a distributor means any professional in the GB supply chain, whose activity does not affect the safety properties of a product.

Definition of producer

Source: General Product Safety Regulations 2005: Great Britain.

The definition of a UK producer is: the manufacturer of a product, when they are established in the UK and any other person presenting themselves as the manufacturer by affixing to the product their name, trademark or other distinctive mark, or the person who reconditions the product.

When the manufacturer is not established in the UK, a producer is defined as follows:

i. if the manufacturer has a representative established in the UK, that representative is deemed to be the producer

ii. in any other case, the person established in the United Kingdom that places a product from a country outside the United Kingdom on the market becomes the producer

3 CHECKLIST OF RECOMMENDED INFORMATION FOR MANUFACTURERS

	Information to be provided	Category		
		1	2	3
1	Marking and labelling	✓	✓	✓
2	Installation information	✓	✓	✓
3	Test evidence (where applicable)	✓	✓	✓
4	Third Party Certification (where relevant)	✓		
5	Intumescent protection	✓	✓	
6	Care and maintenance information	✓	✓	✓
7	Detail on publication of manufacturer information	✓	✓	✓
8	Other relevant documentation	✓	✓	✓

Table 2 – Summary of information to be provided by manufacturer

1. Marking and labelling

Under General Product Safety Regulations 2005 the producer must allow for traceability by indicating on the product or its packaging, where reasonable to do so:

- The name and address of the producer
- The product reference or, where applicable, the batch of products to which it belongs

The following information should also be provided:

- Importer's/Manufacturer's name and address
- Product name or number
- Specification identification e.g. fire resistance period such as FD30, EI60 etc.
- Labels – please note that it is not necessarily a requirement that labels/ marking be visible in use and reference should be made to relevant regulation
- Conformity marking (where applicable under appropriate regulation)
- Third party certification labelling where applicable (as per individual scheme rules)

3 CHECKLIST OF RECOMMENDED INFORMATION FOR MANUFACTURERS

2. Installation information

The following should be included within the installation information:

1. Fire rating/classification e.g. FD30, EI60 etc.
2. Material/core of door to which the product is permitted to be fitted
3. Minimum thickness of door to which the product is permitted to be fitted
4. Reference to any relevant fire test evidence
5. Reference to any relevant third-party certification
6. Any declarations required in respect of conformity marking
7. Required aperture size (where relevant)
8. Location/positioning of product on door in relation to appropriate test evidence/testing standard. (This relates to both height and positioning in relation to door perimeter)
9. Tools required to fit product
10. Permitted fixings required - What is the specification, material, size, type as per detailed by the manufacturer and certification. Also if the fixings are included with the product.
11. Required intumescent protection - What is the specification, material, size, type as per detailed by the manufacturer and certification. Also if it is included with the product.
12. Pictorial diagrams (particularly for complex products to be installed)
13. Specific step by step instruction on how the product is to be fitted in a compliant manner
14. A note stating that installation should only be carried out by those who are competent to do so
15. A note stating that specification should only be carried out by those who are competent to do so

3 CHECKLIST OF RECOMMENDED INFORMATION FOR MANUFACTURERS

	Information to be provided	Category		
		1	2	3
1	Fire rating/classification e.g. FD30, EI60 etc.;	✓	✓	✓
2	Material/core of door to which the product is to be fitted	✓	✓	✓
3	Minimum thickness of door to which the product is to be fitted	✓	✓	
4	Reference to any relevant fire test evidence	✓	✓	✓
5	Reference to any relevant third party certification	✓	✓	
6	Any declarations required in respect of conformity marking	✓		
7	Required aperture size (where relevant)	✓	✓	
8	Location/positioning of product on door	✓	✓	✓
9	Tools required to fit product	✓	✓	✓
10	Permitted fixings required	✓	✓	✓
11	Permitted intumescent protection required	✓	✓	✓
12	Pictorial diagrams	✓	✓	✓
13	Specific step by step instruction on how the product is to be fitted	✓	✓	
14	Note that installation should only be carried out by those who are competent to do so	✓	✓	✓
15	Note that specification should only be carried out by those who are competent to do so	✓	✓	✓

Table 3 – Checklist of installation information

3 CHECKLIST OF RECOMMENDED INFORMATION FOR MANUFACTURERS

3. Test evidence/assessment/field of application (where applicable)

Test evidence (test reports) are a manufacturer's and/or distributor's evidence or claim that the product they manufacture and/or supply behaves in a particular way when subjected to the conditions of the test that has been undertaken. This evidence can relate to fire, smoke, security or any combination thereof.

The manufacturer should be able to support any claims being made with valid test evidence which is relevant and to a current standard.

It should include detail on where and when it has been tested (note that it is recommended that manufacturers use an accredited test laboratory).

A test report, considered in isolation, only confirms the performance of the test specimen, as tested, on the day. In order to apply the results of testing to the product as routinely manufactured and offered for sale, it is important that the sampling, and the design of the test itself, are carried out with care. A third-party certification body can oversee this process and the resulting certificate will precisely define the scope to which it applies. For this to work, the certification body must be seen to be impartial; consequently, such bodies are organisationally distinct from test houses.

The assessment process ideally requires discussions between the test sponsor and the assessment/certification body prior to testing, to agree the test sponsor's requirements for the complete product range and establish the optimum test programme, although assessment based on existing test evidence is still possible. Once the fire test programme has been successfully completed, the assessor is able to provide an opinion in the form of an assessment report that will combine all items of test data into a single document identifying the maximum permitted parameters, or consider any specific changes to the tested specification that the test sponsor requires. The assessment report becomes the document that the test sponsor will use in support of their test reports. Assessment reports normally have a stipulated validation period such as 5 years, after which time they should be returned to the assessing body for review. Again, it is the responsibility of the manufacturer or distributor of a product/material to ensure that the product specification supplied complies in all respects with the specification and parameters identified within the assessment report. This assessment purely represents an opinion as to the performance likely to be demonstrated on a fire test, on the basis of the evidence referred to.

A Field of Application report (sometimes referred to as a Global Assessment) outlines the performance that can be achieved of a specified door/doorset design following successfully testing it for fire resistance and extrapolating the results it achieved to define what variations from the tested specification are permitted, whilst maintaining the required level of fire performance.

Note that there may be criteria under assessments or Extended Applications (EXAPs) which need to be considered in relation to interchangeability for some components.

3 CHECKLIST OF RECOMMENDED INFORMATION FOR MANUFACTURERS

4. Third Party Certification (where relevant)

There is a variety of Third-party certification schemes available, each with their own differing rules / limitations / attributes. The following are examples of schemes which are available, and which should be referred to if you are in possession of the relevant certification:

- Fire
- Fire and smoke
- Security
- Combination of all above - Products that have dual or triple performance characteristics (e.g. smoke / security / fire integrity / insulation)
- Environmental (e.g. through an Environmental Product Declaration)

The minimum requirement for accreditation of a certification body (e.g. by UKAS) is EN ISO/IEC 17065.

The minimum requirement for the certification of a doorset manufacturer is that the certification scheme on offer must be a type 5 product certification scheme in accordance with EN ISO/IEC 17067.

Also note that the initial type testing must be carried out by a test laboratory accredited to EN ISO/IEC 17025.

The importance of third party certification schemes, whilst not mandatory are heavily recommended in statutory guidance documents. Examples of this include:

Approved Document B Volume 2, 2019 edition for England states the following "Third party schemes of certification and accreditation of installers can provide confidence that the required level of performance for a system, product, component or structure can be achieved at the end."

Approved Document 7 2013 edition for England states the following " There are many independent third party certification schemes in the UK and elsewhere that may provide information on the performance of a product. Such schemes certify that a material complies with the requirements of a recognised document and it indicates it is suitable for its intended purpose and use."

5. Intumescent protection - complete

In many instances, for critical door hardware components, such as locks, latches, hinges, flush bolts, door closers, etc., some form of intumescent protection should be fitted in accordance with the door or the hardware manufacturer's evidence/certification.

Where specific products require intumescent protection, if not already supplied with the hardware, then the specification of the product should match the test or certification evidence in terms of:

- Location & Pattern – To enable adequate coverage and gap filling / insulation in use
- Material Type & Thickness – To ensure adequate performance in event of fire
- Manufacturer – To ensure compliance with evidence

3 CHECKLIST OF RECOMMENDED INFORMATION FOR MANUFACTURERS

Manufacturers & distributors may supply hardware with intumescent protection already attached to the product or loose in the packaging to be installed on site. They may also be supplied separately without intumescent protection. Whilst it is incumbent upon the installer to undertake their task with due diligence, and follow manufacturers' test evidence, manufacturers should ensure that the following information on the intumescent protection is made available:

- Whether on the product or on the packaging:
  - Product manufacturer [name]
  - Specific product code and if relevant type
  - Third Party Certification information as per scheme requirements if relevant
  - A link to product information and documentation (for example through a QR code…..)
- As part of the product information provided within the product packaging or hosted online:
  - Fitting instructions and/or Datasheets which make clear the suitability and applicability of the product and its scope. To include where relevant:
    - Generic fire door construction type
    - Fire door rating (e.g. FD30/FD60 or E30, EI30, E60 etc..)
    - Where applicable, details of the specific hardware for which it is designed
  - Safety Data Sheets where applicable
  - Third Party Certification certificates where relevant

6. Care and maintenance information

It is critically important that care and maintenance information is provided by the manufacturer for components which are to be installed on fire or escape doors. For example under the Regulatory Reform (Fire Safety) Order in England and Wales 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."

For further information on care and maintenance please refer to www.gai.org.uk/user

7. Detail on publication of manufacturer information

Product information should be clear, accurate, up-to-date, accessible and unambiguous, regardless of how it is conveyed. This information can be provided in a number of different ways and can include published documents, QR codes or can be through other digital platforms e.g. BSI Identify.

8. Provision of helpline information for end users

This can be automated or in person.

4 BIBLIOGRAPHY

Placing manufactured products on the market in Great Britain (www.gov.uk website)

UK Fire Safety Regulations:

- England - Approved Document B Fire Safety Volume 1 and 2
- Scotland –
  - Building standards technical handbook domestic
  - Building standards technical handbook non- domestic
- Wales – Approved Document B Fire Safety Volume 1 and 2
- Northern Ireland - Technical Booklet E Fire Safety

Legislation

- General Product Safety Regulations 2005 Great Britain
- General Product Safety Regulations NI - Regulation (EU) 2023/988

Relevant Standards

- PAS 7050- Bringing Safe Products to the Market Code of Practice – BSI website
- BS EN ISO/IEC 17065:2012 - Conformity assessment. Requirements for bodies certifying products, processes and services- BSI website

Useful Information

- GAI End User Guides www.gai.org.uk/user
- DHF GAI Code of Practice: Hardware for fire and escape doors – www.firecode.org.uk

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 and manufacturers. Its reputation is built on three key areas: education, technical support and community.

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 GAI members with comprehensive advice on issues relating to the legislation, regulations and standards governing the use of architectural ironmongery and related hardware. The GAI is run by the industry for the industry.

www.gai.org.uk

Door & Hardware Federation

DHF is a not-for-profit membership organisation that represents all the key players in locks and building hardware, doorsets, industrial doors and shutters, domestic garage doors and automated gates.

Due to its dedication for maintaining and raising quality standards, DHF has become the industry's 'go to expert' on training and technical advice, with its team sitting on various UK and European committees. It contributes to relevant industry standards and provides legislative and regulatory advice for professionals.

Through its commitment to educating the market, DHF has created comprehensive training and CPD programmes that benefit the industry. It is an accredited assessment centre for the Awarding Body in the Built Environment (ABBE) providing formal qualifications, forms part of an NOCN assessment centre for the industry specific NVQ and offers a wide range of fire and non-fire doorset courses in collaboration with BRE.

DHF continually produces publications such as best practice guides and technical specifications for the industry and was fundamental in the creation of DHF TS 007-1:2024.

www.dhfonline.org.uk