



**Response to
Welsh Government
Consultation Document:
Amendments to Part B (Fire Safety)
of the Building Regulations**

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Organisation details		
Name and position	Douglas Masterson Technical Manager	
Contact Details	douglas.masterson@gai.org.uk 00 44 7469 141657 www.gai.org.uk	
Are you responding as an individual or on behalf of an organisation?	On behalf of an organisation	
Name and address of your organisation	The Guild of Architectural Ironmongers (GAI) Ironmongers' Hall, Shaftesbury Place, Aldersgate Street, London EC2Y 8AA	
Removal of national classifications		
Question 26	Do you agree that the national classifications for reaction to fire should be removed from Approved Document B? [Agree/Disagree]	Agree
	Do you agree that the national classifications for fire resistance should be removed from Approved Document B? [Agree/Disagree] If you disagree, what evidence can you provide which outlines why.	Disagree

<p>Question 26</p>	<p>If you disagree, what evidence can you provide that outlines why [Free text]</p>	<p>The proposal to remove the national classification system (BS 476 parts 20-22) and require the use of the EN 13501 classification system instead may have benefits for some construction products, but it could be very damaging to the UK timber fire door industry and its associated architectural ironmongery industry.</p> <p>The proposed move to European classification requires a move to European fire testing standards (EN 1634 for testing of fire doors), making it no longer acceptable to specify any product that was previously compliant under BS 476.</p> <p>Although a relatively old standard, BS 476 (or more specifically, part 22 of that standard) has successfully delivered robust safety assurances for timber fire door users for many years and we still consider it very much fit for purpose.</p> <p>The majority of the timber fire door industry in the UK continues to test to BS 476 part 22. Very simply, this is because BS 476 part 22 uses a different testing methodology than EN 1634 testing – a methodology which is much better suited to the needs of this industry and its customers.</p> <p>Fire testing to BS 476 part 22 has always proved very reliable. Indeed, post-Grenfell, testing volumes have increased even further in response to the demand for more primary test evidence.</p> <p>A recent indicative survey of GAI door manufacturing members shows companies that have spent hundreds of thousands of pounds on this testing this year, with similar amounts budgeted for next year and beyond. One of our members (a fire door manufacturer) has cited that its business alone has more than 600 BS 476 part 22 tests which will become redundant if the proposed changes go ahead.</p>
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		<p>Thanks to BS 476 part 22, there is now a huge array of fire test evidence in existence for many types of door structures varying in size and configurations. This test evidence also includes numerous types of ironmongery. Under the proposed changes to AD-B, the vast majority of the existing test evidence which has been amassed over decades, and which has cost many millions of pounds to gather, will become useless.</p> <p>If required to move to EN 13501 classification for timber fire doors, this would mean changing to an EN 1634 fire testing regime, which would mean that a huge number of doors would have to be retested.</p> <p>The current cost of a typical full-scale, UK-based fire test is currently in the region of £8,500 to £11,000 per doorset. Retesting would cost the industry many millions of pounds, a cost which ultimately would have to be passed on to customers and consumers.</p> <p>In a recent survey of our members, 18 companies came forward with estimates totalling about £20 million in testing costs. This is just a sample of the wider market. The actual cost to the whole UK industry will be orders of magnitude higher – and doesn't even begin to cover the costs of the many other products that would also be impacted by the same changes.</p> <p>We do not believe that there is any evidence to suggest that moving to classification in EN 13501 will make fire doors any safer or deliver any meaningful life safety benefits.</p> <p>We urge the Welsh Government to retain the acceptance of BS 476 for timber doors in order to help retain a significant body of test data, to safeguard product availability for UK customers, and to protect vital overseas markets which have become particularly important for many UK door hardware manufacturers and suppliers, and are a great British export success story.</p>
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Transition Period

There are already many well-known problems around product testing capacity, therefore, should this change go ahead then a sufficient transition period must be considered. If we remove acceptance of BS 476, manufacturers will need to replicate a vast amount of expensive fire testing which takes time. As an example, one GAI door set manufacturer has told us that, looking at its current product offer and the tests that have been used to create the certification, they would foresee the need to carry out 150 new tests. This would occupy a test lab for a whole year, testing just their products alone.

We regularly hear from our members that the current waiting time for a testing slot is between 6-12 months. The waiting time for test reports themselves can be another 6-9 months. The requirement for a substantial amount of testing to EN 1634 would make this substantially longer as test houses are already at capacity.

The current testing system is under pressure and the proposed change could potentially overwhelm it – even before the full impact of retesting for UKCA marking also comes into play.

Should it be decided that the EN 13501 classification must be used instead of BS 476 for all relevant products, including timber fire doors (a proposal we do not support), then given the lack of capacity in fire testing facilities in the UK and even across Europe, the GAI would strongly urge the Welsh Government to allow a transition period of no less than five years if these changes are implemented.

It is worth noting that a similar consultation in Ireland (on its Technical Guidance Document B) has suggested using BS 476 and BS EN 1634 for existing doors and BS EN 1634 for new only. This may also help during a transition period.

The GAI believes the withdrawal of the national classification and move to EN 13501 is likely to lead to a significant and immediate restriction on the variety, availability

and use of proven fire safety products such as timber fire doors and associated hardware. This is due to several key factors, including:

The end of expert judgement

Unfortunately, unlike the current system, the classification of fire doors in the EN 13501 standard is a process which allows no expert judgement or assessment. Not even assessments or statements of expert opinion written by qualified fire consultants in accordance with the relevant PFPF guidance ('Guide to Undertaking Technical Assessments of the Fire Performance of Construction Products Based on Fire Test Evidence'), which is highly respected.

For example, under the proposed changes, a fire test on a fire door which is single swing, single leaf and hung on hinges would not be allowed to extend to a double swing door on a floor spring, even though these doors perform in predictably similar ways. These are the sorts of expert judgements that are currently made by notified bodies in accordance with the PFPF guidance.

The EN 13501 standard expresses the results of EN 1634 fire tests, as well as their Direct Applications (DIAPs) and Extended Applications (EXAPs), into classes such as E30, E60 etc through a very conservative and rigid methodology. This results in a much narrower scope of products than those currently permitted under BS 476. It is impossible to provide primary fire test evidence to cover every eventuality for fire doors in terms of their direction of swing, size and specification of ironmongery. The number of permutations is vast. This is where expert assessments come in. Such assessments allow well-informed judgements, by highly competent and qualified experts, to advise on the areas and end-use applications which cannot otherwise be tested.

The removal of any scope for expert judgement and assessments will lead to a dramatic and immediate reduction in safe door and hardware solutions available to the market.

The end of door assemblies, hardware choice and jobs

As explained above, over many years, a huge bank of fire door test evidence has been created which provides confidence to specifiers and building owners about their choice of door assemblies – that is, their chosen combinations of doors and architectural ironmongery. Unfortunately, the proposed changes to standards would sweep all of this away.

In particular, the EXAP standards for timber doors (under EN 15269 3) cause difficulties for the sensible interchangeability of ironmongery because of the rigid nature of the EXAP rules.

This has severe consequences for UKAS-accredited third-party certification schemes in our industry, such as CERTIFIRE, BM Trada and QMark. Looking outside the UK, it is also important to note that many non-EU territories trust and rely on BS 476 rules for interchangeability within their recognised third-party certification schemes too. These schemes use the interchangeability rules within BS 476 to generate a controlled but comprehensive scope of approval for individual door hardware items. This would not be permitted under the classification of fire doors to EN 13501.

There are consequences for building designers too, particularly architects and interior designers, who wish to have the freedom and confidence to specify at an early stage in the design process the specific door and hardware configurations to achieve their aesthetic vision for a building – combinations which are currently subject to technical safety advice and regulatory compliance checks offered by architectural ironmongers, but might not now be allowed under the European rules. Instead, designers will be increasingly driven towards using standardised door sets.

Other than obtaining specific primary test evidence, under the EN rules the only way any interchangeability may be possible is if an Extended Application (EXAP) report has been prepared and accepted. This EXAP process is also highly rigid and creates a large amount of administration between door manufacturers and hardware manufacturers.

		<p>The potential for interchangeability of hardware on fire doors according to fire test evidence from BS 476 part 22 and resulting assessments from notified and approved bodies, is a key part of the architectural ironmonger's job. Having fewer products available to specify (which would be the case because of this proposed change in regulation) would impact the specification process, and by extension the specifiers who play a major role in the fire door industry.</p> <p>Hence, there are also severe consequences for the architectural ironmongery profession itself.</p> <p>The GAI estimates there are currently about 1,000 architectural ironmongery businesses in the UK, employing over 15,000 people. These are highly qualified businesses, lauded as a model of competency in their field. Architectural ironmongers are typically educated to DipGAI level (a qualification which can take up to three years to achieve), and many are also Registered Architectural Ironmongers with a track record of annual CPD and third-party accreditation of ongoing learning.</p> <p>Specifying and supplying ironmongery (most notably to fire door assemblies under BS 476 part 22) is a major part of their business. GAI internal research has estimated that there is a ratio of between 75-80% door assemblies to 20-25% fire door sets sold in the UK market.</p> <p>Should BS 476 part 22 be withdrawn from regulation, the specification of ironmongery on fire door sets might then be dominated by the door set industry.</p> <p>This could lead to job losses across the door and ironmongery industry. Some of these will be self-employed subcontractors who work on construction sites. Others will be from smaller family businesses that are not set up to provide door assemblies to EN standards, or to compete with the much bigger European fire door manufacturers who would inevitably gain a stronger foothold within the UK market.</p>
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