



Template for comments / observations returned during the consultation				Date:	Document: Amendment to the Building Regulations, Part B (Fire Safety)
Name of Organisation / Respondent	Section (e.g. 1.0, 2.0, etc)	Subsection (e.g. 1.1, 1.2, etc)	Paragraph / Table No. or Diagram No. (e.g. Interpretation / Section 2.1.2.6 / Appendix B.5.1.1 / Diagram 56)	Type of comment G = General E = Editorial T = Technical	Comment / Observation
Guild of Architectural Ironmongers	Appendix B	B1 General		T = Technical	<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 Irish timber fire door industry and its associated architectural ironmongery industry.</p> <p>The proposed move to European classification for doors which are not in existing buildings as per B2 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 in GAI still consider it very much fit for purpose.</p> <p>The majority of the timber fire door industry in Ireland 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 in the UK (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. 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 Technical Guidance Document B, the vast majority of the existing test evidence which has been amassed over decades, and which has cost many millions of Euros 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 Euros / 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 Irish and 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. We urge the Irish Government to retain the acceptance of BS 476 for new timber doors in order to help retain a significant body of test data, to safeguard product availability for Irish customers, and to protect vital overseas markets which have become particularly important for many door hardware manufacturers and suppliers.</p>
Guild of Architectural Ironmongers	Appendix B	B1 General		T = Technical	<p>There is also no mention of a transition period of allowing both BS 476 22 and EN 1634 1 tested doors to co-exist. (This has been suggested in the recent consultation of Approved Document B in England.) Not having a transition period would create huge concerns in the architectural ironmongery industry and among GAI members. There are already many well-known problems around product testing capacity.</p> <p>If we remove acceptance of BS 476 from new timber doors, 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.</p> <p>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.</p> <p>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 in the British market also comes into play.</p> <p>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 Irish Government to allow a transition period of no less than five years if these changes are implemented.</p>

Guild of Architectural Ironmongers	Appendix B	B1 General		T = Technical	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.
Guild of Architectural Ironmongers	Appendix B	B1 General		T = Technical	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 PFFP 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 PFFP 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.
Guild of Architectural Ironmongers	Appendix B	B1 General		T = Technical	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 third-party certification schemes in our industry, such as CERTIFIRE, BM Trada and QMark. 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. 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. Hence, there are also severe consequences for the architectural ironmongery profession itself. The GAI estimates there are currently about 40 architectural ironmongery businesses in Ireland (not including door manufacturers), and this will potentially impact thousands of people across the door and ironmongery industry. 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. 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 Irish market. 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. This could lead to job losses across the Irish door and ironmongery industry. Some of these will be self-employed subcontractors who work on construction sites. Other job losses will be from architectural ironmongery companies who will find that the business model that they employ has changed due to the change from door assemblies to door sets. As one GAI member has stated to us: "The proposals contained within the new requirements are yet another nail in the coffin of any independent architectural ironmonger (AI) not linked to a door manufacturer. The changes will make it impossible for an independent AI to write a complete specification for an architect and could put businesses such as mine in a position where we just become purveyors of lever handles to the public. This could have ramifications on the amount of staff I need, my turnover and whether it's actually worth carrying on as an architectural ironmonger." The GAI believes the restriction on ironmongery on fire-rated doors due to the proposed changes will greatly impact the size of the Irish architectural ironmongery industry.
Guild of Architectural Ironmongers	Appendix B	B1 General		T = Technical	Likely impact on building owners, specifiers and installers - There are some projects and supply chains which are more likely than others to be affected by product shortages and retesting delays. For example, we would expect the current drive to build new hospitals and prisons to slow or stop due to the inability to obtain specialist doors that meet the required criteria (for example ballistic/blast resistance or radiation proofing). Many of these doors are tested to BS 476, so there will be delays before these can be retested and released onto the market. The impact of these proposed changes will also push up the price of fire doors themselves. The price of a finished fire door set is usually more expensive than a fire door assembly. GAI internal research estimates that withdrawing BS 476 part 22 from regulations could increase the price of a typical fire door package by around 20-25%. This is even before likely price increases caused by the increased costs of testing as outlined above. This represents yet another significant price rise to be borne by Irish contractors, clients and consumers. Given these price rises, there is also a risk that developers will seek to specify the cheapest possible door sets in place of what would have been higher-quality assemblies. This is value engineering brought back into fire safety, and exactly what the Hackitt Review in the UK has warned us to avoid.
Guild of Architectural Ironmongers	Appendix B	B1 General		T = Technical	GAI recommendations - Should it be decided that the EN 13501 classification must be used instead of BS 476 for all relevant products, including timber fire doors, the GAI's first recommendation is that there should still be room for expert assessment to allow the interchangeability of ironmongery products on fire doors. Using the Passive Fire Protection Forum's (PFFP) 'Guide to Undertaking Technical Assessments of the Fire Performance of Construction Products Based on Fire Test Evidence' could allow expert assessments based on both EN 1634 and BS 476 part 22 test evidence. Finally, it should be noted that Technical Guidance Document B is only one part of how we can improve life safety in our buildings, and only one part of how we can further boost the quality and correct use of fire doors in Ireland. We have indicated above many issues for consideration. But in addition to the proper classification and testing of fire doors, such products must also be correctly specified, installed, signed off, inspected and maintained throughout their whole life cycle. Building users must be made aware of their responsibilities in respect of how fire doors are used and how easily they can be compromised. Further emphasis on all stages post-specification and supply must be carefully considered, as opposed to looking at one specific area in isolation such as testing standards. GAI is happy to work with the Irish Government to help in these regards.
Guild of Architectural Ironmongers	Appendix B	B1 General	Table 36	T = Technical	There is only mention of the EN 13501 2 classifications for fire doors in Table 36 (eg E30), with no mention of classification of fire doors to BS 476 22 (eg FD30) which would be applicable under section B1 - ie fire doors for existing buildings