British Woodworking Federation (BWF)

Submission of evidence to the Building Regulations review 2017

Including input from

- **BWF Members**
- **BWF-Certifire Fire Doors and Doorsets**
- **FDIS- Fire Door inspections scheme**
- **Fire Door Safety Week national safety campaign**

13th October 2017

The British Woodworking Federation is the trade association for the woodworking and joinery manufacturing industry in the UK. It has 700 members drawn from manufacturers, distributors and installers of timber doors, windows, conservatories, staircases, furniture, all forms of bespoke, interior and architectural joinery as well as suppliers to the industry.

The BWF-Certifire scheme for fire doors and fire doorsets was set up over 20 years ago, in order to combat bad practice and provide best practice guidance to its members and to promote the value of properly tested and fully certificated fire doors and doorsets as part of the overall fire safety system within a building. The scheme has over 150 members representing manufacturers, component and raw materials suppliers, licensed processors of fire doors, installers of fire doors and fire door inspectors.

Further information:

British Woodworking Federation

BWF-Certifire Fire Door Scheme

Fire Door Inspection Scheme

Fire Door Safety Week campaign

Supporting documentation available

- British Woodworking Federation Fire Safety Manifesto
- Fire Door Safety Week 2016 report

Dear Dame Hackitt,

I write to you on behalf of the members of the BWF-Certifire Scheme for Fire Doors and Doorsets. Our membership is involved in the manufacture, supply and installation and inspection for fire safety timber products, particularly timber fire doors. Members of the BWF-Certifire scheme produce approximately 2 million timber fire doors for the UK market every year. The Fire Door Safety Week campaign came out of the need to raise awareness about these critical life safety products and has also given us the insight into the wider way in which other factors affect the overall fire safety of a building.

Fire doors are often overlooked when it comes to fire safety but they play a key role in passive fire protection. This is why they are particularly important in apartments and high-rise blocks. A fire door is often called upon to prevent the spread of deadly smoke and fire throughout a building, protecting occupants and fire fighters, and limiting damage and the consequential costs of fire.

But in our experience, fire safety breaches relating to fire doors are endemic within the construction industry

This is not isolated to high rise residential sleeping accommodation in the social housing sector, but it includes a wide range of buildings; small and large, new build, refurbishment or change of use, across an even wider range of sectors such as low-level buildings, elderly care, healthcare, sheltered, specialist, educational, recreational, hotels, as well as a high number of other private, public, historic and high-profile buildings.

The BWF has structured our response to highlight limitations in the current process and recommendations for improvements, and pick up on as many points from the original 10 questions, as well as highlighting other factors and recommendations, drawn from our individual disciplines and experiences that are important to consider. Due to time constraints of the submission deadline we are likely to continue developing this document, with input from the wider BWF membership.

Fire safety of a building is about a holistic approach. We could list hundreds if not thousands of factors that contribute to what could be classed as a positive outcome to a fire. But in some cases we are dealing with decades of neglect and a frustrating culture of cutting corners and doing the bare minimum, rather than taking a long term view, and realising that collectively we hold the power, and may now have the momentum, to make buildings safer for generations to come.

We remain at your service to provide further information and guidance.

Yours sincerely,

Kevin Underwood
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1. The overarching legal requirements

Building regulations, guidance (approved documents) and routes of compliance:

Current limitations:

- The documents are inconsistent throughout, particularly on detail related to products.
- Much of the language is inaccessible to the intended users.
- The documents do not establish a clear set of principles, instead they cross reference other parts of the regulations and can become confusing. For example, there is little knowledge of how Regulation 7 and associated guidance should drive selection of products and quality of workmanship. Regulation 38 is often completely overlooked, with no standard format or process defined and completion from a Building Control perspective granted without proof of compliance (due to contractual process).
- There is an overarching lack of knowledge of how the approved documents work in conjunction with the regulations themselves and alternative routes for compliance. .
- There is confusion between the Fire Risk Assessment process and the Building Regulations and often the phrase "applicable at the time of construction" is used as a loophole or justification for not carrying out essential upgrade works. This is particularly prevalent when changing demographics and use profiles of a building are considered.
- Knowledge of the building regulations and approved documents is often viewed in an isolated fashion based on the performance characteristic most important to the designer or client. Justifications are applied and there is a lack of consideration about how a decision made to fulfil one aspect will impact on other parts of legislation, and ultimately on the performance of the overall building (e.g. Fire / Acoustics / Thermal and Security). This is particularly prevalent in existing, historic or 'heritage' buildings that may be undergoing change of use alterations.
- Determinations are often misused and applied to support above.
- At times guidance can be inaccurate, particularly in relation to definitions of products such as Building Control Alliance note on FD20's which states:

> Construction industry practice, however, has not significantly changed over the years. It is still common for an FD30 fire rated door leaf to be installed in a site made frame without the installation of intumescent seals. Whilst this practice may not be directly supported by an appropriate fire test or independent certification, this method of installation has been widely accepted by building control as providing sufficient protection to escape routes within dwellings.

This legitimises practice that the industry does not recognise.

- Construction Products Regulations have the potential to confuse for Fire Doorsets. CE Marking will severely reduce scope of test evidence currently available (due to variances in BS and EN testing), does not include adequate audit or traceability requirements, does not cover all permutations of how fire doors are assembled installed, does not include all products that we would define as fire doorsets and is often seen as a mark of quality when it is not.

Recommendations:

- Enshrine within the building regulations the requirement for third party certificated product systems and installations to be used for fire door products within a building, this helps to overcome concern associated with product selection and limitations on time to ascertain whether test reports relate to the product supplied.
- Include in legislation that all fire door products must be suitable marked to enable full traceability through the supply chain and to show evidence of fire performance characteristics.
- Improve the ways that guidance documents are communicated – better drawings and images, and simpler language integrate more checklists to support compliance

- Be broader in the "useful links" to allow support organisations to develop videos, animations and other support tools to help engender understanding (see NHBC Standards Extra as an example)
- Review the current content and look to remove inconsistencies or conflicts between different guidance documents, and consider building in factors of safety and future considerations to suit the current demographic and risk profile of our communities and buildings.
- Consider core criteria rather than cross referencing to improve understanding as to how Regulations relate to one another. Make it clear which is the most important consideration should conflict arise (it will almost always be Fire).
- Introduce a minimum level of competency training and qualification regarding understanding of the building regulations and associated guidance relating to fire doors in a building for those that work in the design and construction. This could be linked to the existing CSCS Card Scheme.
- Establish a criterion for Fire Risk Assessment process formally into the building regulations and building control process to support sign off and handover of projects. (See section below on Fire Risk Assessment).
- Include the requirement to undertake regular maintenance and inspection of fire safety elements by third party certificated individuals or companies.
- Fully liaise with the devolved governments and other administrations to ensure clarity and consistency and share best practice.
- Look post Brexit to move the Construction Products Regulations back to a more Construction Products Directive approach recognising that it does not work for all product areas and where there is no benefit to moving to European Standard testing companies should not be forced to.

2. Fire safety legislation

Limitations:

- The Responsible Person is often not aware they have formal and legal responsibility. This is particularly evident during construction phase, when who is the nominated competent person is not clear at each stage of the process (Fire Door Safety Week campaign research). There are however many scenarios where the Responsibility is less obvious (e.g. when there is a Tenant Management Organisation or a shared leasehold).
- Where there is confusion, it can make it more difficult for building users to report faults and concerns. Confusion can extend, complicate and potentially undermine prosecutions. *Case study: The fatality and inquest of Sophie Rosser, Hansard 2015*
- Building owners or managers are often under the false belief that the fire brigade issue certificate of compliance.
- Small fines and penalties are often applied to potentially serious breaches of fire safety, and prosecution not made.
- There is inconsistency in enforcement by different Fire and Rescue Services often due to resource available.
- There is no recognised format for a Fire Risk Assessment and no pass – people see the Assessment as the mechanism for compliance rather than the actions it recommends.
- In buildings that have both tenant and leasehold occupied individual dwellings, there is confusion about the elements of the building that contribute to fire door safety and who is responsible for their inspection, maintenance and upgrade.
  Case study: Croydon council gains injunction to upgrade non fire rated flat front door
  https://www.croydon.gov.uk/sites/default/files/articles/downloads/oh-autumn2014.pdf

Recommendations:

- Introduce public register of responsible persons – all buildings must report to the local authority who the responsible person is and display it prominently in the building. Failure to report should incur fines.
- This register could also require a mandatory confirmation that a Fire Risk Assessment has been completed – this could be managed in a process like a VAT Return or be implemented through the Insurance Sector. The date of the last completed Fire Risk Assessment could also be displayed with the name of the Responsible Person (in a similar way to certain Insurance Documents being required to be publicly displayed or company registration).
- Consider a Fire Risk Assessment mechanism like MOT, with a standard template (for each building type) and where there is a clear failure process and necessary remedial steps before a building is deemed safe.
- Focussing on properties where there is mixed ownership, it is imperative that works to the fire envelope are controlled by the Responsible Person for the public areas. Oftentimes it is unclear who is responsible for the threshold and action is not taken as a result if for example a flat front entrance door is replaced by a non-fire rated door. This scenario puts all tenants at risk.

3. The roles in the construction or refurbishment process

Limitations:

- The construction process is fragmented and responsibility for fire safety is not always clear to those involved who and how responsibility is transferred.
- A lack of control in the process that allows specifications to be adapted without reporting – the Zero Carbon Hub reported evidence of inadequate product substitution with no formal reporting on 100% of housing sites they visited for their Performance Gap report.
- Poor installation skills with inadequate supervision and inspection is not an uncommon problem. Even on carded sites, it is not always clear if workers have the specific skill and knowledge in key areas.
- Little training across construction on the importance of fire compartmentation meaning that compartments are often inadvertently breached by follow-on trades or during subsequent refurbishment works (e.g. cables channelled through door frames).
- Lack of enforcement of Regulation 38 means it can be difficult to maintain products as it is not always clear what they are (and the specification has often changed from the original design).
- There is inconsistency in terms of how performance of product is declared and as long as someone has a piece of paper on file people are usually happy – not enough time is spent checking the detail and paperwork can be done to tick boxes rather than ensure safety.
- With so many people involved in the process, there is often there is a culture of individual risk mitigation rather than assuming project risk management.
- Time and money are oftentimes put before fire safety, particularly related to products such as doors, which are late fix and often a project will be behind in terms of time or cost.

Recommendations:

- RIBA is currently working on a 'Plan of Works' to manage fire safety throughout the entire process and chain, this is encouraging work and will help. It should be supported through the Regulations to bring consistency, define roles and highlight individual responsibility and formal handover points and procedures.
- Responsibility should be emphasised through the CDM Regulations to reinforce responsibility during the construction phase and a clear ongoing liability for faults in the design or construction of a project.

- Look to the CSCS Card system to highlight competence of individuals and ensure appropriate training has been done.
- Mandate that Fire Compartments are consistently marked on ALL construction sites so that people know when they are working on an essential fire envelope.
- Where work is started to breach a fir compartment a Passive Fire Protection permit (similar to a Hot Works Permit) should be introduced and the project cannot be signed off until an appropriately trained supervisor has inspected the work to ensure it has been made good.
- Introduce a whistle blowing process for workers to report instances when an individual was pressured to push ahead with a job and essential corners have been cut or product is inadequately substituted.

4. The role of Building Control

Current limitations:

- There is confusion as to what Building Control sign off provides – it is often seen as a clean bill of health and used as an excuse not to make essential improvements that were not picked up in the inspection process.
- Building control have limited resource and are expected to be experts in everything.
- Faults may be covered and it is not realistic for Building Control to identify them (e.g. gaps behind architraves)
- Often works are undertaken and it is unclear to the contractor or property owner whether Building Control should be notified

Recommendations:

- Reset expectations and remind contractors and clients that Building Control sign off does not guarantee that a building is safe and compliant, just that no problems were identified.
- Consider Building Control approving and inspecting construction processes as well as construction outputs.
- Mandate the role of a nominated independent 'clerk of works' role throughout the entire design, build and handover stages to provide independent scrutiny and expertise regarding the approval of building materials or systems relating to fire door safety.

5. Checking and inspection, enforcement:

Inspection:

Limitations: .

- Almost anybody can set themselves up as a Fire Risk Assessor or to undertake vital functions as Fire Door Inspections, there are few methods to clearly define competence.
- All too often Fire Risk Assessors do not have sufficient knowledge of doors to know if they are adequate, this can lead to misleading
- Inspection requirements are vague in the regulations. The is evidence that few fire doors are inspected and even less by qualified individuals.
- The Fire Door Inspection Scheme gathers data on doors inspected by qualified inspectors. Some of the results are concerning, especially considering those having such thorough inspections are likely to be the more enlightened building owners:
    - 61% of doors had their fire or smoke seals either missing, installed incorrectly or not fitting the perimeter gaps correctly.
    - o 34% of doors had gaps between the door and frame in excess of the recommended 3mm

- o Almost one in six had significant damage to door leaves.
- o Over a third had incorrect fire door signage
- o Almost 1 in 5 had unsuitable hinges

Recommendations:

- Establish a standard format for Fire Risk Assessments clarifying knowledge requirements and the specifics of when individual elements must be inspected.
- Have a clear definition of competence and accredited training for all those undertaking inspections of buildings
- Consider a PAT type system for Fire Doors (such as that used by the Fire Door Inspection scheme www.fdis.co.uk)

Enforcement:

Limitations:

- There huge confusion as to who to report problems to, trading standards, FRS, Building Control or the HSE.
- All have regional variances and few opportunities to set National Precedence.
- All have thinly spread resource – Trading Standards, for example, were given Construction Products Regulation to enforce after severe cuts

Recommendations:

- Look at a better National System to draw together the various enforcement bodies and ensure information and procedures are consistent across the UK
- To take enforcement action should not be an economic (business) decision

6. Tenants' & Residents' Voice in the current system:

Limitations:

- A lack of knowledge and the difficulty in identifying a Responsible Person make it difficult for Tenants Associations to operate effectively.
- Make a clear National Process for Tenants to escalate concerns without being branded as 'troublemakers' and put in fear of eviction
- Research undertaken for Fire Door Safety Week Basic reveals that fire safety measures are lacking with four in ten (40%) renters saying there is not a clear fire escape route displayed in their building, and more than a third (39%) admit they have seen fire doors propped open.
- More than two in ten people (21%) have noticed damage to their building's fire doors and almost a fifth (18%) of renters have reported a fire safety infringement or concern to their landlord but almost a quarter (24%) waited weeks for a response.
- The majority of tenants (55%) say they do not feel fully prepared on what to do in the event of a fire.

Recommendations:

- An independent regulator to be set up to give more empowerment and voice to tenants, residents, occupiers and those involved in managing safety. Mechanism to report and record issues, or untimely remedial action.

- Publish occupancy and satisfaction ratings for social housing blocks
- Ensure the Responsible Person is tasked to attend regular meetings with the Tenants Association
- Look at a process where as part of a Fire Risk Assessment, tenants are consulted on how safe they feel.
- A mandated requirement to respond to tenants concerns within a set timeframe (similar to the Freedom of Information Request requirement)

7. The way building components are safety checked, certified and marketed in relation to building regulations:

Limitations:

- Assessments are widely used, but commonly misinterpreted.
- It has been our experience that fire safety marketing information and test reports are accepted at times when there in insufficient scrutiny or a lack of expertise in relation to how they are applied and may impact on other materials or product components within a system.
- Many products are tested totally in isolation and do not account for the interaction, with other elements. For a Fire Door to function, all of the components (seals, glazing, ironmongery) must be compatible.
- Many lack a formal process to check that products are as originally specified, or even whether the products that are delivered to site are as specification.

Recommendations:

- Third party certification of fire doors by an accredited UKAS organisation to become mandatory.
- Guidance provided about who would be considered as competent to scrutinise and approve products relating to the fire safety of a building.
- Products relating to fire safety should be clearly (and consistently) marked to ensure full traceability to the manufacturer, installer and their specification.
- We support the PFPF recommendation on Assessments in Lieu of Fire Tests. .
- Mandatory record keeping of the installations and inspections of fire safety elements throughout the construction or refurbishment process and during the life of the building.
- Promote mechanism for reporting product infringements or enforcement for manufacturers making false or ambiguous product performance claims. – Trading Standards
- Agree a minimum template of supporting documentations that is required to make a full and robust approval of products, both in isolation and as part of any system.
- Promote the procurement and specification of fire safety products as one system rather than individual components sourced from different suppliers. This is a key area where specification gets diluted and unsatisfactory products are subsequently supplied.
- Create a mechanism to report where unsuitable materials have been substituted and specification broken on site (suggest this could be enforced by the HSE as part of CDM regulations)
- Advertising standards authority to be involved and regulate marketing of fire safety products
- Improve the use of language and terminology: e.g. certification, accreditation, assessment, test report, marketing declaration, independent, only accreditation body. third party. UKAS. etc

Differentiation within the current Regulatory System

It is critical that the right approach is determined for the right building, but legislation must help to drive this risk assessment approach and a framework created. It is clear that high rise multi occupancy residential buildings are higher risk, partially due to functional considerations and demographic, but also due to decades of neglect to fire safety measures. These should be given priority and special consideration given.

International Comparisons and Other Sectors

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?

The Republic of Ireland has clearer regulation through their Building Control Amendment Legislation through the "Assigned Certifier" to identify responsibility.

USA and Australia have more stringent and precise guidelines on Fire Door Certification

In Germany contractors require a license to purchase a fire door

CE marking is widely misunderstood to given assurance of entire product performance, in reality it gives a snap shot of some elements of performance, and does not provide the same benefits, control or scrutiny that third party certification provides. CE marking should not be considered a substitution for third party certification

Examples of good practice from regulatory regimes in other industries/sectors:

Sectors such as nuclear, aerospace and shipping have a culture of only accepting third party accredited products, that are fully tested as systems of components, and using accredited installers, and using a process that includes auditing by independent third party to ensure that safety standards and quality of performance is maintained. In these sectors, **these requirements are intrinsically linked to being able to gain insurance cover.**

The EU Timber Regulations has very much been developed in collaboration and close consultation with industry and as a consequence engagement means that the industry is in itself really driving up standards.

Gas Safe has a mechanism to condemn products and ensure that corrective action is taken.

PAT testing is a good mechanism for clearing products for use.

Fire Door Extinguisher and Alarm testing seem to be better managed than doors.