



NFCC
National Fire
Chiefs Council

The professional voice of the
UK Fire & Rescue Service

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Response to the 'The Future Homes Standard:
2019 Consultation on changes to Part L and
Part F of the Building Regulations for new Dwellings'
Ministry of Housing, Communities and Local Government
2nd Floor SW, Fry Building
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London
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United Kingdom

Sent via email to: FutureHomesStandardConsultation@communities.gov.uk

7 February 2020

To the Ministry of Housing, Communities and Local Government,

Response to the 'The Future Homes Standard: 2019 Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for new dwellings'

Please find attached the National Fire Chiefs Council (NFCC) response to the 'The Future Homes Standard: 2019 Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for new dwellings'.

The NFCC is the professional voice of the UK fire and rescue services and is comprised of a council of UK Chief Fire Officers. This submission was put together through the NFCC's Protection and Business Safety Committee, which I Chair. The Committee is comprised of protection and fire safety specialists from across the UK.

NFCC supports the move towards increasing the energy efficiency of new homes and reducing the environmental impact when they are built. However, the drive for sustainable and higher quality buildings must be balanced with the need to ensure that new and existing building stock achieves a high degree of fire safety. In our view, there should not be a conflict between sustainability, improved building standards and fire safety.

Interaction Between Approved Documents

The review of Approved Document F and Approved Document L should not be carried out in isolation. The proposed changes should be linked to the ongoing review of Approved Document B to ensure that the proposals outlined in the current consultation do not affect the fire safety of new homes and existing building stock. The proposed changes should also account for the guidance around the ban on the use of combustible attachments to buildings as outlined in The Building (Amendment) Regulations 2018. NFCC is concerned that, without this awareness, changes could be introduced which negatively affect fire safety

Fire safe ventilation

Incorrectly designed ventilation systems can contribute to the spread of fire and smoke beyond the compartment of origin, which can lead to a significant risk to life. Whilst the relationship between Approved Document F and Approved Document B has been strengthened by the introduction of an 'Interactions with other parts of the Building Regulations' section and a sub-section on 'Interaction with Part B', NFCC believes that there are areas where this link can be further emphasised, specifically by:

- including relevant fire safety regulatory guidance in the external references section;
- making reference to fire safety (in particular maintenance of fire compartmentation where ventilation ductwork penetrates elements of fire resisting construction) in the proposed commissioning sheet proforma;
- including a reference to Regulation 38, in order to help ensure that the person carrying out the work provides fire safety information to the Responsible Person. This should include information about fire compartmentation and protection of service penetrations.

Integrating the conservation of fuel and power and fire safety

Although the functional requirements of Part L and most of the content of Approved Document L do not have a direct interaction with the fire performance of buildings, there are some areas where fire safety requirements should be more closely integrated, specifically:

- **Solar hot water heating and the associated controls as well as generation, distribution and storage infrastructure**

At present, there is minimal reference within Approved Document B and other regulatory guidance, with regard to the fire safety of photovoltaic/solar panel installations. Approved Document B only refers to photovoltaic/solar panel installations in so far as they may constitute a 'specified attachment' to an external wall (i.e. in terms of Regulation 7(2) and requirement B4).

Building Regulations guidance should provide specific advice with regards to the fire safety of photovoltaic installations as they can present a serious hazard to firefighters when undertaking fire-fighting operations. Guidance should cover:

- The provision of information about photovoltaic installations, for the use of firefighters, as part of premises information. This should include information to assist firefighters in locating photovoltaic cells/arrays, isolation controls, inverters etc.;
- The provision and siting of electrical isolation controls, which should be readily accessible to firefighters in an emergency;
- The increased potential for fire spread, at roof level where photovoltaic installations are present.

Whilst the inclusion of guidance for the fire safety of photovoltaic installations would be more appropriate for Approved Document B, when it is revised, Approved Document L should make users aware that photovoltaic installations present a serious hazard to firefighters and that they should consult the relevant fire and rescue service for further guidance.

- **Insulation materials and Requirement B4**

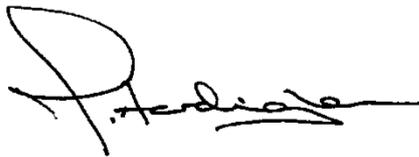
In order to achieve the required level of energy performance, insulation materials are required to be used. Often, the available insulation materials are combustible, which leads to a direct correlation between the materials used to achieve the desired level of energy performance of buildings and the fire performance of the building envelope.

At present, the proposed draft of Approved Document L makes no direct reference to the fire performance of materials (the only cross reference to Approved Document B is with regards to Regulation 7(2), which only applies to certain defined buildings). However, requirements of B4 apply to all buildings to ensure that the external walls and roofs of any building to which the Building Regulations apply adequately resist the spread of fire.

Approved Document L should make explicit reference to functional requirements B4 (1) and B4 (2) and the relevant content in Approved Document B, in addition to Regulation 7(2) and The Building (Amendment) Regulations 2018. This could be achieved by an 'Interaction with Part B' section, similar to that included in the draft Approved Document F.

A direct cross reference to Approved Document B and Regulation 7 should be included within the proposed Build Quality guidance.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'M. Hardingham', with a stylized flourish at the end.

Mark Hardingham

NFCC Protection and Business Safety Committee Chair

Response to relevant questions within Annex E of the consultation document

The Future Homes Standard 2019

Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for new dwellings

Respondent details	
Name	Mark Hardingham
Position (if applicable)	Protection and Business Safety Committee Chair
Organisation (if applicable)	National Fire Chiefs Council
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Telephone number	07827 281979
Please state whether you are responding on behalf of yourself or the organisation stated above	Responding on behalf of the National Fire Chiefs Council (NFCC)

Which description below best identifies you or the organisation you are responding to this consultation on behalf on?

- National representative or trade body

Please tick the one box which best describes the size of your or your organisation's business.

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders)
- Small – typically 10 to 49 full-time or equivalent employees
- Medium – typically 50 to 249 full-time or equivalent employees
- Large – typically 250+ full-time or equivalent employees
- None of the above (please specify):

The National Fire Chiefs Council (NFCC) delivers the unified professional voice of the UK fire and rescue service. Through the respective Chief Fire Officers of all UK Fire and Rescue services, NFCC manages national work programmes through its national Coordination Committees and their workstreams.

Q24 Do you agree with the removal of government Approved Construction Details from Approved Document L?

- a. Yes
- b. No

If no, please explain your reasoning.

If Approved Construction Details are retained, it is important that these details are reviewed to ensure that they are compatible with fire safe construction, in particular with reference to the fire performance of the external envelope of buildings as well as in terms of fire resisting compartmentation.

Q25 Do you agree with the proposal to introduce the technology factors for heat networks, as presented in the draft Approved Document?

- a. Yes
 b. No, they give too much of an advantage to heat networks
 c. No, they do not give enough of advantage to heat networks
 d. No, I disagree for another reason

If no, please explain your reasoning.

In addition to the potential for de-carbonising, heat networks also provide the opportunity to decentralise heating and consequently remove heating appliances from homes; this may reduce the incidence of fires, as a proportion of fires in dwellings involve heating appliances.

Q27 Do you agree with the external references used in the draft Approved Document L, Appendix C and Appendix D?

- a. Yes
 b. No

If no, please explain your reasoning.

There should be suitable references within Approved Document L to Approved Document B with a strong emphasis on the need to consider fire safety along with compliance with the functional Requirements of Part B and Regulation 7. Specifically, this should make clear that insulation materials should not facilitate the spread of fire across the external walls and roof of a building.

Approved Document B does not currently provide recommendations with regards to photovoltaic installations and associated infrastructure. NFCC believe that guidance should be provided with regard to these installations as a part of the ongoing review of Approved Document B. There is an opportunity to refer to the need for consideration of fire safety in the design of renewable energy systems (specifically solar hot water systems) within Approved Document L.

Q45 Do you agree with the external references used in the draft Approved Document F, in Appendices B, D and E?

- a. Yes
 b. No

If no, please explain your reasoning and suggest any alternative sources.

Reference should be made to relevant fire safety guidance within the appropriate appendices. At minimum, this should include the following documents:

- BS 9991:2015 *Fire safety in the design, management and use of residential buildings. Code of practice*
- BS 9999:2017 *Fire safety in the design, management and use of buildings. Code of practice*

Q46 Do you agree with the proposed commissioning sheet proforma given in Appendix C of the draft Approved Document F, volume 1?

- a. Yes

b. No

If no, please explain your reasoning.

It is our view that the proposed commissioning sheet proforma should either make reference to fire safety, or a disclaimer should be included which makes clear that fire safety is not covered and that this needs to be considered separately during commissioning by suitably competent persons. A range of serious fires which have occurred since the Grenfell Tower fire, have highlighted the importance of ensuring passive safety measures have been installed (as specified) and checked appropriately. Examples include the major fire in Worcester Park where compartmentation was a clear issue.

For example, in Part 2b, 2.3a: 'For ducted systems, has the ductwork been installed so that air resistance and leakage is kept to a minimum?' is included, but no reference is made to checking that ductwork has been installed in accordance with the recommendations of Approved Document B and/or other relevant standards and guidance.

Q47 Do you agree with the proposal to provide a completed checklist and commissioning sheet to the building owner?

a. Yes

b. No

If no, please explain your reasoning.

If it is considered appropriate to include fire safety in the proposed commissioning checklist, a reference should be made to Regulation 38 'Fire safety information' of the Building Regulations 2010 and the requirement for fire safety information to be passed on to the Responsible Person.

The fire safety information provided to the Responsible Person should include details of compartmentation and the means by which service penetrations (including those involving ventilation ductwork) have been installed. Without this information being satisfactorily handed over, there is a risk that future alterations to premises may result in fire compartmentation being compromised.

Q57 Do you agree with the introduction of guidance for Build Quality in the Approved Document becoming part of the reasonable provision for compliance with the minimum standards of Part L?

a. Yes

b. No

Please explain your reasoning and provide evidence to support this.

We support measures to improve the build quality of new residential buildings. Consideration should be given to including a reference to Approved Document B and Regulation 7. Ensuring that build quality is improved can positively impact on the safety of residents throughout the lifetime of a building.

Q58 Do you have any comments on the Build Quality guidance in Annex C?

We recommend that a cross-reference is made to Approved Document B and Regulation 7.