

# Building (Amendment) Regulations (Northern Ireland) 2020

Public consultation document C.3

# **Consultation Response Form**

August 2020

(closing date for receipt of responses is 4:00 pm on Friday 09 October 2020)

# Building (Amendment) Regulations (Northern Ireland) 2020 - Consultation

#### **Completion of the Response Form**

The Department will consider all responses to this consultation received on or before the closing date for receipt of responses which is **4.00 pm on Friday 09 October 2020**. *Submissions made after this date will not be considered.* 

We would be grateful if you would use e-mail to return the completed Response Form to: info.bru@finance-ni.gov.uk

#### However it may be posted to -

Karen McKernon Consultation Co-ordinator Department of Finance Building Standards Branch Floor 6 Goodwood House 44-58 May Street BELFAST BT1 4NN

Please refer to the package of Consultation Documents which outline fully the proposed amendments and to the consultation Regulatory Impact Assessments which accompany this Response Form.

These documents are available at -

https://www.finance-ni.gov.uk/consultations

Consultees are encouraged to respond on any aspects of the proposals. However, the Department would welcome answers to and comments on the questions in this Response Form.

For ease of use, questions relating to each aspect of the consultation are referenced by a letter relating to the Part of the Building Regulations that the aspect is considering, for example A1 is a question on Part A: Interpretation and general; B1 is a question on Part B: Materials and workmanship; C1 is a question on Part C: Site preparation and resistance to contaminants and moisture; while C2, C3 etc. are questions on Technical Booklet C: Site preparation and resistance to contaminants and resistance to contaminants and moisture to contaminants and moisture is contaminants and moisture is contaminants and moisture and E1, E2 etc. are questions on Technical Booklet E: Fire safety.

Click on the box (or insert an "x") beside "Yes", "No" or "No view" as appropriate. It is not essential to give an answer to every question. The last question is completely open to enable consultees to make suggestions or observations on relevant issues that are not addressed by answering the preceding questions.

Please make any comments you might have in the box provided. If you disagree with any of the proposals the Department would be interested to know why you disagree.

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#### **Respondent Details**

In order for your response to be considered valid, you must provide the following information:

Name	
Organisation (if any)	Northern Ireland Fire & Rescue Service
Address	1 Seymour Street Lisburn BT27 4SX
Telephone	
Email	
Are you respondir	ng as an individual?

Or are you representing the views of an organisation?  $\square$ 

Responses to this consultation may be made available to the Northern Ireland Assembly or for public inspection, either at the Building Standards Branch office or website.

Information provided in response to the consultation, including personal data may be published or disclosed in accordance with the access to information regimes (see paragraph 3.5 under 'Code of practice on consultations and Data management' and Annex A, in document C2 'Consultation proposals').

You have the option of indicating that you wish your response to remain confidential and the Department will generally respect that request. Should it be decided that the public interest must override that request the Department will contact you before disclosure and, if appropriate, provide an opportunity for your response to be withdrawn.

Is your response confidential?	Yes	No 🖂
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## PART A, INTERPRETATION AND GENERAL: QUESTION

Part A of the Building Regulations (Northern Ireland) 2012 (as amended) (the Building Regulations) defines certain terms used in the regulations and establishes processes which relate to the application of the regulations.

#### (Refer to Section 4 of the Consultation proposals document)

It is proposed to amend Part A of the Building Regulations and in particular regulation 8 (Application to material change of use) so that, when a building becomes a 'relevant building' due to a material change of use, then that building will be subject to the new requirement of regulation 23(2).

The intention is to amend the existing Table to Regulation 8 (Application to material change of use) to demonstrate in the existing Cases where the new requirement in regulation 23(2) will apply.

Note:

This will mean any building which undergoes a material change of use and becomes a 'relevant building' by definition will be required to adhere to the requirements of regulation 23(2) i.e. remove all combustible material from the external walls and replace with non-combustible or limited combustible materials to A1 or A2-s1,d0 standard.

**A1.** Do you agree with the proposal to require a building which becomes a 'relevant building' due to a material change of use to be subject to the requirements of new regulation 23(2)?

Yes 🕅 No	No view
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Comments (if any):

The proposed changes will enhance public and firefighter safety by preventing the spread of fire over the face of a newly constructed 'relevant building' or a 'relevant building' that has undergone a material change.

The risk to public and firefighter safety will be reduced because these measures will assist to confine any fire to the compartment of origin.

## PART B, MATERIALS AND WORKMANSHIP: QUESTIONS

Part B of the Building Regulations sets out requirements in relation to the materials and workmanship used in construction.

(Refer to Section 5 of the Consultation Proposals document).

It is proposed to amend Regulation 23 'Fitness of materials and workmanship' to introduce a new requirement through regulation 23(2) so that materials which become part of an external wall, or specified attachment, of a 'relevant building' are of European Classification A2-s1, d0 or Class A1, classified in accordance with BS EN 13501-1: 2018 (an effective ban on the use of combustible materials for these buildings).

**B1.** Do you agree that combustible materials (bar the exemption list - see proposed regulation 23(3)) in external walls of relevant buildings as defined, should be banned through law? If no, please comment how else the ban could be achieved.

Yes No No view

Comments (if any):

The proposed changes assist to clearly define the materials that are permitted in external walls on a 'relevant building'.

It is proposed to apply the ban to buildings as defined by being a relevant building in regulation 23(4) i.e. a building 18m or more in height, that contains one or more dwellings, an institution or a room for residential purposes (excluding an hotel, hostel or boarding house.

Buildings not within the scope of the ban (for example office buildings) are usually considered to have lower risk due to their reduced occupancy overnight (i.e. no sleeping risk) and are provided with different fire safety provisions to those buildings within the scope of the ban.

Remembering that the requirement of regulation 36 'External fire spread' applies to all buildings irrespective of the requirements of the ban, designers should ensure buildings adequately resist fire spread over the external walls.

There have been several recent fires in hotels in England that have raised concerns. Hotels and hostels are often staffed overnight, can have multiple escape routes, signage and emergency lighting to assist evacuation and a higher level of fire detection and alarm systems in comparison to residential buildings. On the other hand, there is still a sleeping risk in these buildings and residents are generally less familiar with their surroundings than in their own residences.

**B2.** (a) Do you agree that the ban should apply to the scope of buildings as defined by a relevant building?

Yes 🛛 No 🗌 No view 🗌

(b) Do you think hotels, hostels and boarding houses should not be excluded in the definition of relevant building but rather included and thus be subject to the ban?

Yes 🛛 No 🗌 No view 🗌

Please provide any details and evidence why in the comments box below.

Comments (if any):

Hotels, hostels and boarding houses are 'relevant premises' as defined by Article 50 of The Fire and Rescue Services Order (Northern Ireland) 2006.

As such, the managers of such premises are required to comply in all regards with the fire safety duties as defined by the 2006 Order, and the Fire Safety Regulations (Northern Ireland) 2010. The Order and the Regulations rely on self compliance, for which Northern Ireland Fire & Rescue Service are the enforcing authority.

These legal requirements assist to ensure that a higher level of fire safety arrangements are in place in hotels, hostels and boarding houses, when compared to domestic premises.

NIFRS face considerable challenges in fighting fires in buildings over 18m if fire is permitted to spread over the outside of a building. To permit NIFRS to effectively fight a fire, the fire should be confined to the compartment of origin. NIFRS rely on robust

building regulations and approval processes to ensure that buildings are designed and built to prevent fire spread.

It would therefore be the view of NIFRS that all buildings over 18m should be designed, built and managed to prevent the spread of fire over the outside of the building.

NIFRS supports the proposed amendment to Technical Bulletin E, Paragraph 5.4 which makes it expressly clear that in buildings over 18m that specified materials used in the construction of an external wall should be of limited combustibility or better. This assists to provide greater clarity and helps to ensure that unsuitable products are not specified at the design stage or installed at the installation stage.

NIFRS welcomes the proposal to enhance public safety in 'relevant buildings' by specifying which materials used in the construction of an external wall should be non-combustible.

NIFRS would wish to see the definition of 'relevant buildings' extended to include hotels, hostels and boarding houses, and any other premises were sleeping accommodation is provided, which would include for example hospitals, residential care premises, and student accommodation.

This would enhance public and firefighter safety, and enable a more effective use of NIFRS resources, and limit the damage caused by fire in any such building.

The proposed height threshold for the ban in a relevant building is 18m. In light of a recent fire in The Cube building in Bolton which was just under the 18m height, there may be a case to set the height threshold lower. Some suggest 11m is the accepted upper limit of traditional external fire-fighting techniques. 11m is currently used in Scotland for more stringent provisions on external wall construction, although not for an outright ban.

**B3.** (a) Do you agree that the height threshold of the ban should be set at 18m?

Yes 🗌	No 🖂	No view
(b) Do you tl	hink a lower h	eight threshold of 11m should be set?
Yes 🖂	No 🗌	No view
Please provi	de evidence d	on (a) or (b) in the box below as to your reasons why.

Comments (if any):

NIFRS opinion is that 11m is the upper limit of traditional external fire-fighting techniques, for the reasons outlined below.

NIFRS use low rise firefighting tactics for any fire confined to within the first 4 floors of a building. (Ground, 1st, 2nd, or 3rd floor). The tactics permit entry control points to be positioned outside the building and the height enables jets to be applied externally through windows and openings because portable ladders carried on NIFRS appliances can be pitched and are effective to 11m on the outside of a building.

NIFRS use high rise firefighting tactics for any fire on the 5th floor or above of a building. The fire will be fought internally and a staging point (known as a bridgehead) is set up 2 floors below the fire floor from which personnel are deployed to fight the fire.

To all buildings, high reach appliances can be used to provide an independent external rising mains, or for external lighting, or to apply water externally, if there is sufficient access to permit a high reach appliance to be positioned.

The threshold for high reach appliance access is 11m as specified in Technical Booklet E, and access is only required to a percentage of the perimeter which depends on the area and height and of the building.

In buildings of height between 11m and 18m, if a high reach appliance cannot be positioned directly beside cladding on fire, NIFRS will be unable to remove cladding, or cut away items to be able to extinguish fire in, or behind, cladding. The method used will be to extinguish any fire on the inside of the building and rely on any fire to burn out on the outside of the building.

A firefighting jet is effective to a height of approximately 11m, assuming working from the head of a portable ladder, or projecting water using a jet from ground level. At a height over 11m effectiveness will depend on other factors such as volume and pressure of water supply, wind strength and direction.

Although fire and rescue vehicle access will have be designed in at building regulations approval stage, the reality is that when a fire occurs access can be blocked by parked vehicles, or other obstructions, therefore relying on the access specified at design stage, is not always possible.

Therefore the effectiveness of external firefighting over 11m depends on a number of variables which is why NIFRS would support a lower height threshold for the ban in a relevant building to the lower height of 11m.

Introducing a ban on combustible materials requires consideration of what is meant by "combustible". There are a number of possible classifications for combustibility that could be used (National classifications, European classifications and other International assessments). The current guidance in TBE includes reference to the National classifications for combustibility and the European classification system. The Department feels it would be more straightforward to reference a single system for external walls and that would be the more up to date European system.

The European classification system for combustibility is set out in BS EN 13501 and classifies construction products from Class A to Class E using a series of tests. Class A materials have the best performance in a fire and the proposal is to require A2 s1,d0 or better as the acceptable classification under the proposed ban. This is in line with England, Scotland and Wales and standards in a number of EU member states.

Alternative classifications Class A2fl-s1 and A1fl are available for materials tested horizontally as a floor. Some balcony floors are only tested to A2fl-s1 or A1fl classification. These classifications have equally stringent requirements as A2 or A1, however these materials need to be tested in a horizontal position rather than a vertical position.

**B4. (a)** Do you agree that the European classification system should be used and do you consider that Class A2 s1, d0 or better to BS EN 13501-1 2018 is the correct classification for materials to be used in wall construction for relevant buildings?

Yes 🛛 No 🗌 No view 🗌

**(b)** Do you think the classifications should include A2fl-s1 and Class A1fl for materials used horizontally?

Yes 🗌 No 🖾 No view 🗌

Please explain why.

Comments (if any):

By keeping the classifications as simple as possible, this aids clarity and reduces the likelihood of a material that has only been tested horizontally from being accidentally used vertically when a building is being constructed.

The ban of combustible materials will also apply to specified attachments to the external wall. It is proposed that these specified attachments are balconies attached to the external wall, solar panels attached to the external wall and sun-shading devices (including but not limited to blinds and shutters) attached to the external wall. These will all be required to meet the performance requirements of regulation 23(2).

**B5.** Do you agree with the ban applying also to specified attachments (as defined) to external walls?

Yes	$\square$	No 🗌	No view	
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Comments (if any):

It is important that the ban extends to specified attachments because otherwise fire could spread over the outside of a building via an attachment.

Awnings are a sun shading device which will fall under the definition of specified attachment and hence subject to the ban. Retractable awnings provide benefits for commercial premises at ground level. We would welcome any views on exempting such awnings, particularly retractable awnings over shops at ground level.

**B6.** Do you agree that retractable awnings fitted to the ground storey should be exempted?

Yes 🛛 No 🗌 No view 🗌

If yes what restrictions should be placed on these?

Comments (if any):

Retractable awnings should be exempted because, if exposed to fire, they should permit the fire to burn through to allow heat and smoke to vent freely to fresh air.

If a retractable awning was not exempted, heat and smoke from a fire below a retractable awning, would be radiated downwards which would lead to untenable conditions below the awning, and rapid fire spread. Awnings are often used on open seated areas, or over an entrance which also provide a means of escape. It would be safer if they were able to burn away, or melt, on exposure to heat.

The restrictions that should be placed on retractable awnings are that they should be of limited combustibility, so that they have a limited contribution to fire spread and do not present a hazard from self-sustaining flaming droplets. This restriction will still permit them to burn through when exposed to heat from a fire.

The proposed ban will apply to all components of the external wall system. There will obviously be some components of the wall system that are necessary for the wall to function correctly, and where a Class A1 or A2-s1, d0 product is not available.

The proposed exemption list is to allow the use of some components where there is no practical alternative to using materials that are not Class A1 or A2-s1, d0 and where the risk of external fire spread caused by the use of combustible materials would be so low that it would be disproportionate to ban their use.

Products such as boiler flues that have a plastic inner lining and the use of paint on masonry walls which is often applied on site, are products not on the list of exemptions. Cavity trays between two leaves of masonry are proposed to be exempt and there may be a case to exempt all cavity trays.

It is proposed that glass including laminated glass is exempt from the ban but only when included within a window frame or door. Laminated glass is also used in balcony construction. Under the proposal, laminated glass in balconies will have to comply with the new requirement of A1 or A2-s1, d0 classification.

Insulation and water proofing materials used below ground level are proposed to be exempt. These materials can be continued up to 250mm above ground to prevent moisture penetration of the external walls.

**B7.** (a) Do you agree with the list of exemptions in Regulation 23(3)?

Yes 🖂	No 🗌	No view
(b) Do you th	nink boiler flue	es with a plastic inner lining should be added to the list?
Yes 🗌	No 🖂	No view
<b>(c)</b> Do you th list?	nink certain pa	nints used on external masonry walls should be added to the
Yes 🗌	No 🖂	No view
<b>(d)</b> Do you th	nink all cavity	trays should be exempt?
Yes 🗌	No 🖂	No view
		I glass in balcony construction should not have to achieve A2- and be exempt?
Yes 🗌	No 🖂	No view
()	•	ofing and insulation material from below ground level to up to el should be exempt?
Yes 🖂	No 🗌	No view

Please explain your reasons why to the answers to any of the questions to **B7** in the box below.

Comments (if any):

B7(a) - the list is appropriate.

B7(b) - a boiler flue with a plastic inner lining poses little risk because should it fail in a fire, the fire will not spread over the outside of the building because the other materials on the outside of the building will be non-combustible.

B7(c) - the risk from external paint on a masonry would appear to pose a minimal risk of external fire spread.

B7(d) - the proposal to only exempt cavity trays when used between two leaves of masonry is appropriate.

B7(e) - glass on balconies could extend to the full height of a balcony and could permit fire to spread vertically. Balcony's pose a risk due to their use for barbeques, smoking, or storage of combustible items.

B7(f) - water proofing and insulation material from below ground level to up to 250mm would appear to pose a minimal risk to fire spread.

Research carried out on behalf of Ministry of Housing, Communities and Local Government (MHCLG) in England indicates that products with a polyethylene core are by far the most hazardous cladding materials of those tested<sup>1</sup> post Grenfell fire tragedy. In New South Wales, Australia, the use of Aluminium Composite Metal (ACM) cladding (with a core comprised of 30% or more polyethylene by mass) has been banned with exceptions, in various buildings. As the use of polyethylene cored products as cladding materials poses such a high fire risk, we would like to hear views on an outright ban of their use on any buildings, regardless of height or purpose. The thinking would be to apply the ban to any metal composite panel (including but not limited to zinc and copper) with a core comprised of greater than 30% polyethylene by mass.

<sup>&</sup>lt;sup>1</sup> https://www.gov.uk/guidance/aluminium-composite-material-cladding

**B8.** Do you agree metal composite panels with a polyethylene core of 30% or more should be banned from being used in external wall construction of any building regardless of height or purpose? If no please explain why.

Yes	$\square$	No	No view	
		110	110 11011	

Comments (if any):

NIFRS are concerned that a building fitted with metal composite panels with a polyethylene core of 30% or more, poses too great a risk to occupants to be permitted on any building regardless of height or purpose.

This was evidenced by the speed with which flames propagated over the outside of Grenfell Tower, and other such global cladding related fires.

At ground level the likelihood of a fire impacting on cladding is increased due to the risk posed by the proximity of fires arising at ground level in refuse, refuse bins, vehicles, and from sources of flame such as smoking, or arson.

NIFRS internal firefighting tactics all rely on a fire being confined to the room of origin, and externally firefighting tactics require on being able to access to external parts that are on fire.

The access to the perimeter of a building is limited to that as described by Section 6.18 and Table 6.2 of Technical Booklet E. This restricted access means that NIFRS are limited in their effectiveness to be able to extinguish a fire spreading over all parts of the outside of a building.

The Department has published a Consultation Regulatory Impact Assessment (RIA) as part of the consultation documents and welcomes further evidence to inform a final stage RIA.

(Refer to Consultation Regulatory Impact Assessment)

**B9.** Do you agree with the assumptions, costs and impacts set out in the consultation stage RIA?

Yes	$\boxtimes$	No 🗌	No view	
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Comments (if any):

No further comment.

#### PART C, SITE PREPARATION AND RESISTANCE TO CONTAMINANTS AND MOISTURE: QUESTIONS

Part C of the Building Regulations sets out requirements in relation to: site preparation; resistance to contaminants (such as radon), subsoil drainage; resistance to moisture and weather, and interstitial condensation.

#### (See Section 5 of Consultation proposals)

The proposal is to amend the definition of "radon affected area" in regulation 25(3) to make reference to the Public Health England (PHE) publication 'Radon in Northern Ireland: Indicative Atlas'. This will mean through the application of regulation 26(2) that a radon affected area for Northern Ireland can only be established through the use of this 2015 PHE publication. The subsequent measures that need to be taken to prevent or limit the ingress of radon from the ground into any dwelling in a radon affected area are then given in guidance in Technical Booklet C.

**C1.** Do you agree with the proposal to update the definition of "radon affected area" to reference the PHE publication 'Radon in Northern Ireland: Indicative Atlas' of 2015?

Yes	1 🗌 o	No view 🖂

Comments (if any):

This matter is outside the remit of NIFRS.

# TECHNICAL BOOKLET C, SITE PREPARATION AND RESISTANCE TO CONTAMINANTS AND MOISTURE; QUESTIONS

The proposed amendment to regulation 25(3) will consequently mean an amendment to accompanying guidance in TBC. The Department is issuing a draft version of an amended TBC alongside this consultation package (see paragraph 3.1 of document C2 'Consultation proposals'). The amended guidance will:

- Reference the 2015 PHE publication 'Radon in Northern Ireland: Indicative Atlas', replacing the previous 'Radon in dwellings in Northern Ireland 2009 Review and Atlas';
- highlight the UKradon website for a free download of the 2015 PHE publication and also where free interactive UK maps of radon are available;
- replace the reference to the Northern Ireland Environment Agency with Public Health England, Geological Survey of Northern Ireland and the British Geological Survey for further advice;
- update the 'Radon protection in dwellings' guidance with reference to 2015 BRE publication BR 211 'Radon guidance on protective measures for new buildings' which incorporates for the first time, Northern Ireland indicative atlas maps for assessing the need and level of protection measures. This guidance replaces reference to the previous BRE publication BR 413;
- reference Section 4 of BR 211 which considers the level of protection measures required including consideration of the use of site specific radon risk reports (where available) as an optional measure in a radon affected area; and
- reference BR211 as appropriate guidance to follow in the application of regulation 26(2) for extensions, alterations to existing dwellings and buildings converted to a dwelling through a material change of use. Existing references to GBG 73 (2008) and BR 267 (2008) for radon protection measures for domestic extensions and alterations and conversions to existing dwellings respectively to be deleted.

The Northern Ireland indicative atlas maps contained in the 2015 PHE publication are for the first time replicated in BR 211 'Radon – Guidance on protective measures in new dwellings'. The new edition of the standard is proposed to be referenced in the amended guidance as the document to follow in relation to the measures needed to limit or prevent the ingress of radon from the ground into a dwelling. The BR 211 standard not only gives guidance for new dwellings but also extensions and alterations to existing dwellings and to dwellings created as a consequence of a material change of use.

**C2.** Do you agree with the inclusion of BR 211 in the draft Technical Booklet C as the guidance to follow in relation to the measures for preventing or limiting the ingress of radon in new dwellings?

Yes 🗌 No 🗌 No view 🖂

Comments (if any):

	₹S.	This matter is outside the remit of
<b>C3.</b> Do you agree with the citing of BR 211 in the draft Technical Booklet C as the guidance to follow in relation to the measures needed in relation to preventing or limitir the ingress of radon for extensions and alterations to existing dwellings or to buildings converted to a dwelling through a material change of use?	easures needed in relation to preventing or limiting d alterations to existing dwellings or to buildings	guidance to follow in relation to the ingress of radon for extension

Yes 📋	No 📋	No view 🖂		
Comments	(if any):			
This matter	is outside the	remit of NIFRS.		

Section 4 of BR 211 gives guidance on determining the level of protection required for radon in a radon affected area or not. The level of protection is site specific and can vary from no protection to basic protection measures (provision of a radon barrier) to full radon protection measures (provision of a barrier plus subfloor depressurisation e.g. a sump and stub duct).

BR 211 also suggests the use of site specific radon risk reports for new development sites or for existing dwellings with a postcode as an optional measure, that if followed may allow a lower level of protection than would otherwise be required.

**C4.** Do you agree with the use of site specific radon risk reports in BR 211 for new development sites or for existing dwellings with a postcode, as an optional measure to take that may allow a lower level of protection than would otherwise be required?

Yes No No view 🖂

Comments (if any):

This matter is outsid	e the remit of NIFRS.
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The Department has published a Part C Consultation Regulatory Impact Assessment (RIA) as part of the consultation documents and welcomes further evidence to inform a final stage RIA.

(Refer to Part C Consultation Regulatory Impact Assessment)

**C5.** Do you agree with the analysis/principal assumptions, costs and impacts set out in the Part C consultation stage RIA?

Yes 🗌	No 🗌	No view 🛛		
Comments	(if any):			
This matter	is outside the	remit of NIFRS.		

## **TECHNICAL BOOKLET E, FIRE SAFETY; QUESTIONS**

Part E of the Building Regulations sets out fire safety requirements in relation to buildings.

(Refer to Section 6 of the Consultation Proposals document and consultation version Technical Booklet E).

No changes to Part E legislation are to take place however a number of changes to Technical Booklet E (TBE) are proposed. The Department is issuing a consultation version of a TBE indicating the proposed changes as part of this consultation (see paragraph 3.1 of document C2 'Consultation proposals'). The amended TBE will provide guidance on demonstrating compliance with the new Part B requirement 23(2).

This new guidance to regulation 23(2) in Part B will be placed in Section 5 'External fire spread' of TBE.

**E1.** Do you agree with the guidance proposals in Section 5 of the consultation version TBE for 'relevant buildings'?

Yes 🛛 No 🗌 No view 🗌

Comments (if any):

The guidance proposals for 'relevant buildings' are clear and unambiguous.

The proposal will also involve an amendment to the existing guidance in Section 5 of TBE to give recognition to the alternative method of compliance with external fire spread requirements via a BS 8414 large scale test and BR135 classification report for other non-relevant buildings.

**E2.** Do you agree with the guidance proposals regarding changes to external fire spread requirements in external walls which includes introduction of the alternative method of compliance via a BS8414 test and BR135 classification report for non-relevant buildings?

	Yes	$\square$	No 🗌	No view 🗌	
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Comments (if any):

No additional comment.		

The current guidance in TBE includes reference to the National classifications for combustibility and the European classification system. The Department feels it would be more straightforward to reference a single system and that would be the more up to date European system. The European classification system for combustibility is set out in BS EN 13501 and classifies construction products from Class A to Class E using a series of tests.

The exclusion of the alternative British Standard classifications from the guidance does not necessarily mean these classifications are not acceptable for demonstrating compliance with regulation 36 for non-relevant buildings. The change brings TBE into alignment with England and Wales equivalent ADBs and Scottish Technical Handbook guidance in referencing the European classifications only in relation to reaction to fire tests for external surfaces of walls.

**E3.** Do you agree that TBE uses only the European classifications for the specification for reaction to fire performance of external surfaces of walls for all buildings?

Yes 🛛 No 🗌 No view 🗌

Comments (if any):

The use of only European classifications will make TBE easier to understand.

The functional requirement of regulation 36 of the Building Regulations 2012 requires that – "the external walls and roof of a building shall be so designed and constructed that they offer adequate resistance to the spread of fire over them, and from one building to another, having regard to in the case of an external wall- the use, position and height of the building". This requirement applies to buildings of any height.

Whilst these consultation proposals do not intend to expressly prohibit the use of combustible materials within or attached to the external walls of buildings below 18m, it is necessary to consider the risk from fire spread to health and safety in relation to buildings of any height. Designers should ensure that the building adequately resists fire spread over the external walls, not just in relation to buildings over 18m in height but also to low rise buildings. New guidance in TBE will give effect to this clarification.

**E4.** Do you agree with the new guidance in relation to external fire spread considerations in relation to all buildings irrespective of height or use?

Yes 🗌 No 🖾 No view 🗌

Comments (if any):

NIFRS are aware that the content of the proposed Paragraph 5.4A and Table 5.1A (New) mirrors the provisions specified by the England Approved Document B, Table 12.1.

NIFRS questions the content of the proposed paragraph 5.4A which states that consideration should be given to the prevention of external fire spread. However, Table 5.1A (new) states that 'no provisions' or 'no minimum performance' are specified for certain types of building. Therefore, NIFRS, or any other regulator, will not be able to assess if paragraph 5.4A has been met in those buildings in which there are 'no provisions' or 'no minimum performance' criteria.

It would be helpful to remove any ambiguity so that a designer, or a regulator, is able to determine if paragraph 5.4A has been met, by comparing proposals against specific criteria. Without specific criteria, it will not be possible for a designer, or a regulator, to determine if the design proposal is, or is not, acceptable.

For example: A designer proposes to face a hospital building of 17m height, that is more than 1m from the relevant boundary, with PVC that is highly combustible. The designer states in their proposal that they have assessed the design against Paragraph 5.4A and due to the height, distance from the boundary, and other factors, the designer is not concerned that this poses a risk to occupants. The designer submits the application for approval and the regulator checks the proposal against Table 5.1A(New) which states that there is 'no provision' for such a building. Because the designer has complied with paragraph 5.4A, the regulator will be duty bound to approve it. After construction and the building come into use, NIFRS become the enforcing authority for fire safety and would then question how any fire risk assessment could determine any such building is safe. Table 5.1A (New) proposes that:

- the highest standard of fire safety will be applied to 'relevant buildings'.
- the next level of fire safety will be applied to 'assembly and recreation' buildings.
- a lower level of fire safety will be applied to 'any other building'.
- 'no minimum performance' is specified from '10m in height and above' in 'assembly and recreation' buildings of '18m or less'.
- 'no provisions' are specified in 'any other building 18m or less' where it is '1m or more from the relevant boundary'.

NIFRS would question why:

- 'other buildings' up to a height of 18m which provide sleeping accommodation and which present the greatest risk to life, such as hospitals, care homes, hostels, hotels & guest houses, will have a lower specification than 'assembly and recreation' buildings; and
- 'no minimum performance' is specified between 10m and 18m in height in 'assembly and recreation' buildings of '18m or less'.

NIFRS would wish to see:

- clarity be provided to enable the requirements of paragraph 5.4A to be able to be assessed; and
- in 'assembly and recreation' buildings of '18m or less' that between 10m and 18m, a class of class C-s3, d2(3) or better, is also specified for between those heights, as has been specified for 'Up to 10m above ground level'; and
- that in 'any other building' an appropriate class be specified, or the height requirement for 'no provisions' be reduced to a lower level such as '11m or less' to mirror the upper limit of traditional external fire-fighting.

This would further enhance public and firefighter safety and provide greater clarity for regulators.

#### Assessments in lieu of tests (AILOTs)

The purpose of this new guidance in Technical Booklet E (TBE) is to introduce requirements on the use of AILOTs and to ensure that they are only used where appropriate, with sufficient and relevant test evidence and that they are carried out by organisations with the necessary expertise. Organisations listed as 'notified bodies' in accordance with the European Construction Products Regulation or laboratories accredited by UKAS for the relevant test standard can be assumed to have the necessary expertise.

**E5.** Do you agree with the guidance proposals in relation to Assessments in lieu of tests in the consultation version Technical Booklet E?

Yes 🛛 No 🗌 No view 🗌

Comments (if any):

No additional comment.	

#### **GENERAL COMMENTS**

The Department encourages consultees to respond on any aspects of the proposals, therefore the last question is completely open to enable consultees to make suggestions or observations on relevant issues that are not addressed by answering the preceding questions.

**G1.** Please set out any additional comments you have below.

Comments (if any):

NIFRS welcome this opportunity to provide feedback on these proposals and recognise that considerable other amendments will be proposed in due course.

One early suggestion is that the new version of Technical Booklet E would be greatly enhanced if it was provided with a detailed index, to make the document much easier to navigate.

The index provided in the England Approved Document B provides an excellent example of best practice.

For info, there is a minor typo to the proposed Technical Booklet E, Section 5, External Fire Spread, 5.1(a)(iii) "the spread of fire from one building to another are is restricted," the word "are" may be deleted.

Best wishes,

# **NEXT STEPS**

The consultation will close on 09 October 2020. Responses to this consultation will be analysed and the Department response will follow.