

<b>Title of Report:</b>	<b>BUILDING (AMENDMENT) REGULATIONS (NORTHERN IRELAND) 2020 - CONSULTATION RESPONSE</b>
<b>Committee Report Submitted To:</b>	<b>ENVIRONMENTAL SERVICES COMMITTEE</b>
<b>Date of Meeting:</b>	<b>13<sup>th</sup> October 2020</b>
<b>For Decision or For Information</b>	<b>FOR DECISION</b>

<b>Linkage to Council Strategy (2019-23)</b>	
Strategic Theme	Prosperity
Outcome	Actively develop and promote the economic and social development of the area
Lead Officer	Head of Health and Built Environment

<b>Budgetary Considerations</b>	
Cost of Proposal	N/A
Included in Current Year Estimates	YES/NO
Capital/Revenue	N/A
Code	N/A
Staffing Costs	N/A

<b>Screening Requirements</b>	Required for new or revised Policies, Plans, Strategies or Service Delivery Proposals.		
Section 75 Screening	Screening Completed:	N/A	Date:
	EQIA Required and Completed:	N/A	Date:
Rural Needs Assessment (RNA)	Screening Completed	N/A	Date:
	RNA Required and Completed:	N/A	Date:
Data Protection Impact Assessment (DPIA)	Screening Completed:	N/A	Date:
	DPIA Required and Completed:	N/A	Date:

## **1.0 Purpose of Report**

- 1.1 The purpose of this report is provide members with a response to the consultation issued by the Department of Finance on the 14<sup>th</sup> August 2020 with respect to the Building (Amendment) Regulations 2020, to Parts A, B and C of the Building Regulations (Northern Ireland) 2012 (as amended) and changes to Technical Booklets B, C and E.

## **2.0 Background**

- 2.1 Since the Grenfell fire there has been much debate about compliance with the Building Regulations requirement for external walls on buildings to adequately resist the spread of fire. The objective of this policy change is to provide certainty about materials to be used in external wall systems of certain buildings ('relevant buildings').
- 2.2 The consultation proposes an amendment to Part B (Materials and workmanship) legislation and accompanying guidance and a consequential amendment to Part A (Interpretation and general) legislation to introduce a new requirement to ban the use of combustible materials on the external walls of 'relevant buildings', mainly of a residential type.
- 2.3 The consultation also proposes an amendment to Part C (Site preparation and resistance to contaminants and moisture) to amend the definition of "radon affected area" to make reference to a 2015 Public Health England (PHE) publication 'Radon in Northern Ireland: Indicative atlas'. This atlas gives a much more accurate radon map for Northern Ireland. The amendment will be accompanied with guidance changes in Technical Booklet C (Site preparation and resistance to contaminants and moisture) to regulation 26(2) requirements on the measures to be taken to prevent or limit the ingress of radon from the ground into any dwelling situated in a radon affected area.

*\*Radon* is a colourless, odourless radioactive gas formed by the radioactive decay of small amounts of uranium that occur naturally in all rocks and soils. The main danger from high *radon* exposure is the increased risk of lung cancer.

- 2.4 The closing date for receipt of responses was **4.00 pm on Friday 09 October 2020**.
- 2.5 A detailed response has been provided at Appendix A to this report by the Building Control Manager and BCNI.

## **3.0 Recommendation**

**It is recommended** that the Committee endorses the consultation response as provided.

## **APPENDIX A**

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

## Respondent Details

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

<b>Name</b>	Nicky Matthews
<b>Organisation (if any)</b>	Causeway Coast and Glens Borough Council
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<b>Email</b>	nicky.matthews@causewaycoastandglens.gov.uk

Are you responding as an individual?

Or are you representing the views of an organisation?

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

## 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

Comments (if any):

Causeway Coast and Glens Borough Council are of the opinion that any requirements to restrict fire spread over the external walls of new build residential buildings with a storey over 18m should equally be applied to residential buildings formed by a material change of use. The risk to occupants in either scenario from a fully involved external wall/cladding fire will be the same.

However it is clear that the height at which this higher standard will apply is arbitrary in nature and the proposal does not take into consideration risks in buildings with a storey level lower than this height.

## 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.*

Comments (if any):

The new regulation will avoid the confusion which exists with the current performance base standard including the various methods of compliance provided in both building regulations guidance and adopted by industry.

The current standard calls for an ‘adequate’ resistance to the spread of fire over the external walls of a building without any quantifiable measure of what is considered adequate.

Whilst the established BS8414 test and classification methodology in BR 135 provides a mechanism for determining adequacy for tested systems there is little understanding of what rate of fire spread is achieved with various combinations of materials outside this route nor indeed what rate is deemed adequate. In addition the current guidance in Technical Booklet E which carries a presumption of compliance provides no restriction on the quantities or type of combustible material in the external walls of any building with a storey over 18m other than insulation material. The current guidance for example would not prevent the use of polyethylene filled aluminium composite materials (PE filled ACM’s) which was the major cause of fire spread on the Grenfell tower. Thus harmonising the standards in Northern Ireland with other parts of the UK.

Causeway Cost and Glens Borough Council is of the opinion that a ban on combustible material ensures clarity on the requirements for ‘relevant’ buildings and should fully negate the impact of fire spread caused by the external walls for this category of building.

Please also refer to our answer in QA1 with regard to the arbitrary nature of the height at which this new requirement applies.

Yes  No  No view

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):

Causeway Coast and Glens Borough Council believes It would be appropriate to apply the ban to buildings where the highest risk to occupants from a fully involved external wall or cladding fire would occur. Taking into consideration factors such as sleeping risk, the lack of management control, the likelihood of a remain in place design and evacuation strategy, the number, design and construction of escape routes this would most likely be in high rise buildings containing dwellings.

Whilst the majority of fire deaths in Northern Ireland are in single (low rise) dwellings the consequences of a cladding fire of the magnitude as seen at Grenfell tower would have a devastating impact on lives in any high-rise residential building containing dwellings. Council is of the opinion that the choice of height is arbitrary in nature and no analysis has been carried out to determine the appropriate cut off point for this higher standard based on risk or consequence to occupants. The risk in high rise managed accommodation such as hotels would be reduced given factors such as the management control, requirement for common alarm systems, total evacuation strategies and increased number of escape routes. However, a fire in a high-rise hotel of the magnitude as seen at Grenfell tower would still pose a serious risk to occupants where there would be a reliance on fire warnings systems and management control to ensure a safe evacuation.

The proposed changes to Technical Booklet E with regard to non-relevant buildings over 18m i.e. more stringent restrictions applying to all materials in the external wall or alternatively provision of a test to BS8414 will increase the requirements in these buildings from its current level.

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 think a lower height threshold of 11m should be set?

Yes  No  No view

Please provide evidence on (a) or (b) in the box below as to your reasons why.

Comments (if any):

Whilst Council has no evidence with regard to the height at which control should be exercised we would point out that the threshold height of 18m would have limited impact in Northern Ireland given the number of residential buildings containing dwellings that fall into this category. If flammable cladding was specified as part of the external wall construction i.e. certain high pressure laminates (HPL's) or PE filled ACM's the impact may be equally devastating on residential buildings at heights lower than 18m with occupants reliant on remain in place strategies, no common alarm system etc.

Whilst we understand further control may be placed on buildings lower than 18m to restrict the use of polyethylene in the external walls (outlined in this consultation) we do consider that the full ban could be extended to buildings lower than 18m. Perhaps there may be merit in considering building size (area) in conjunction with building height. For example a 5 storey building of limited footprint, typically with an uppermost storey height of 11 m may have less risk and consequence than a 4 storey building, typically 8.5m to floor level of uppermost storey which covers a much larger area and has a much increased level of occupancy.

Whilst these larger buildings may have more than one stair they are still designed and operated on the basis of 'remain in place' in the initial instance of fire. The height of buildings to which these regulations apply in the remainder of the UK differ, i.e. Scotland 11m, England and Wales 18m.

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):

Causeway Cost and Glens Borough Council has no firm opinion on the classification system that should be used however we are not aware of a more relevant system of defining and classifying the reaction to fire characteristics of materials to be considered ‘non-combustible’. This classification system will bring Northern Ireland into line with the remainder of the UK.

**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       No       No view

Comments (if any):

In some external facades the balcony construction can cover an extensive area and for this reason we think they should be considered as part of the external wall and should equally be controlled. This should include any fixed attachment which has the potential to cover an extensive area and therefore increase the potential for fire spread.

**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):

If awnings are limited to ground floor Council is of the opinion that these should have a negligible impact on external fire spread on a façade which is otherwise non-combustible.

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 think boiler flues with a plastic inner lining should be added to the list?*

Yes  No  No view

**(c)** *Do you think certain paints used on external masonry walls should be added to the list?*

Yes  No  No view

**(d)** *Do you think all cavity trays should be exempt?*

Yes  No  No view

**(e)** *Do you think laminated glass in balcony construction should not have to achieve A2-s1, d0 or A1 classification and be exempt?*

Yes  No  No view

(f) Do you think water proofing and insulation material from below ground level to up to 250mm above ground level 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):

Whilst a list of exemptions is useful Council acknowledge it is difficult to provide an exhaustive definitive list. It is important for the industry including those involved in the design, construction and inspection of buildings for there to be clear agreement on the types of materials and components that are exempt from the requirements. This list may need to be periodically updated as further components with negligible impact on fire spread are identified or a mechanism included by which these can be deemed to be exempt. i.e. a 'catch all' clause.

**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.**

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<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  No  No view

Comments (if any):

Council is aware of the highly flammable nature of polyethylene and the risk in certain buildings but we would have no evidence that would allow us to form a strong opinion that these materials should be banned on buildings of any height or purpose. Council sees merit and would welcome a ban on any highly flammable cladding panels or materials on the external walls on a range of buildings especially those that contain a sleeping risk, irrespective of height.

Council acknowledge however the decision on which buildings this particular material should be banned is difficult and perhaps that leads to the conclusion that an outright ban is the only option. Outside a full ban this should be based on risk to occupants and the consequences of a fully involved cladding fire which is the worst case scenario.

Consideration should also be given to a ban on other products on external walls that have been found to promote and sustain rapid fire spread. Council understand further studies are required however evidence in relation to products such as HPL's would indicate that particular classifications of these products may be equally dangerous on certain buildings including those that contain a sleeping risk, particularly buildings designed and operated on the basis of remain in place.

**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  No  No view

Comments (if any):

We are of the opinion that the times provided for the familiarisation of building control surveyors with the new requirements and the times taken for updating office guidance and disseminating same is unrealistic.

The time taken for a building control surveyor to familiarise themselves with this new regulation and guidance including attending any in-house training session and team discussions would be closer to 1 day or 7.5 hours.

In terms of updating and disseminating information for building control offices this should be based on an 11 Council model. The times taken for putting together briefing/training sessions including updating any relevant internal procedures and delivering these across all office's within a Council area would be more in the order of 2 days preparation and organisation and one day for delivery (3 days total per Council).

## 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  No  No view

Comments (if any):

Causeway Coast and Glens Borough Council agree with using the Indicative Atlas but would like a footnote added that whilst the 2015 maps are the most recent any future updated maps should be referenced so that radon measures are based on the latest radon risk information available without having to wait for map references to be updated in the Regulations/guidance document.

Whilst the date reference has been removed from Regulation 25(3) and also Paragraph’s 0.4 and 3.7 in Technical Booklet C but would be better to have footnote as above.

## **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 UK radon 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):

Regulation 26(2) requires the limiting of Radon into dwellings only. In BR 211 it states that the guidance in it applies to all new buildings, extensions, conversions and refurbishment projects, whether they be for domestic or non-domestic use. Public health England also state that radon can be the largest occupational health risk in the workplace. With this in mind should the references to dwelling only Regulation 26(2), Paragraph 0.4 and 3.10 be changed to "Buildings" so that radon measures are now introduced in non-domestic buildings also in line with the guidance in BR 211.

Reference should also be made to GBG 73, GBG 74 & GBG 75 (all 2015) in the guidance as reference documents. These were created by the same author as BR 211 at the same time and are intended to be companion references to BR 211.

Paragraph 3.11 of Technical Booklet C makes reference to BR 211 with (i) and (ii) stating the 2015 Edition. In the BR 211 document it states that the guidance is updated from time to time and users should ensure they are using the most current edition. It is felt that like with the maps a footnote should be added stating that any future updates would be relevant, as this is already a document that is 5years old and could potentially be updated.

In zone 2 BR211 requires the provision of a sump, so that if it is found through testing after occupation that the building has an unacceptably high radon level an electric fan should be connected to the pipework. As Building control have not continuing control after the building is complete it is suggested if the building is in zone 2 then the fan should be required at completion stage, otherwise the provision of a sump in within zone 2 without a fan being installed is effectively the same radon measures as buildings within zone 1.

Radon testing of dwellings on completion and carrying out sump ventilation works is obviously voluntary, but are potential occupiers sufficiently aware of the danger of Radon to prompt testing and venting works?

Should mandatory radon testing be introduced for Zone 2 dwellings along with mandatory provision of sump ventilation if test results are found to be above the 200 trigger?

Alternatively might mandatory mechanical/passive ventilation be introduced for all Zone 2 dwellings thereby negating the need for testing? On the other hand does the risk of encountering a Zone 2 dwelling with 200 radon test level (could be as little as 10% chance based on current Reg C criteria) justify mandating testing and ventilation of all Zone 2 dwellings. However, from perspective of occupier, internal passive venting of the sump may provide high benefits for very little cost/obtrusion, even if it is conservative in terms of above risk.

**C3.** 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 limiting the ingress of radon for extensions and alterations to existing dwellings or to buildings converted to a dwelling through a material change of use?

Yes  No  No view

Comments (if any):

Same comments for question C2 above, i.e. should also be applicable to non-domestic buildings.

**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 de-pressurisation 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):

The person carrying out the building work would need to provide the district council with a copy of the report before the start of work on site, as work at early stages of construction can progress quite quickly resulting in a scenario that a lower level of protection has been installed and cannot be substantiated by the report.

**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):

## 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):

Council agree that the guidance proposals in relation to relevant buildings appears to provide sufficient guidance to industry with regard to the new Part B requirement for 'non-combustible facades'.

**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  No  No view

Comments (if any):

As an alternative to restricting the combustibility of individual elements within the external walls of non-relevant buildings over 18m, Council has no evidence or reasons to suggest this methodology should not be included as an alternative means of compliance.

**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):

See answer to B.4 above. This classification system brings NI into line with the remainder of the UK.

**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):

Causeway Coast and Glens Borough Council is of the opinion that the new guidance is inadequate with regard to buildings other than non-relevant and relevant buildings over 18m in height. Apart from recommendations on measures to restrict the combustibility of external surfaces Technical Booklet E provides no guidance to industry on how to ensure the external walls of these other buildings can be constructed to adequately resist the spread of fire.

In practice there is no industry or regulatory understanding of what ‘adequate’ resistance to spread of fire means quantitatively, nor is there sufficient understanding of how any specific resistance can be achieved by different combinations of materials. Further guidance is required outlining what the regulators expectation is with respect to adequate resistance to spread of fire over the external walls of buildings of any height or use and methods of how this can be achieved. Without this the industry,

including those involved in the enforcement of the regulations, have no understanding of what is required or how this can be achieved.

Council further points out in relation to the guidance provided for non-relevant buildings above 18m in height, the recommendations of paragraph 5.4 relating to restrictions on the combustibility of the external wall construction appears to conflict with the recommendations for the surface combustibility of external walls in paragraph 5.3 and table 5.1A. Paragraph 5.3 and table 5.1A allows a lower standard for surfaces with no guidance on what constitutes the extent of the 'surface' and how this relates to the rest of the external wall.

## 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):

A methodology and procedure including advice on the experience and qualifications of those individuals within appropriately certified organisations deemed competent to carry out these assessments is to be welcomed.

However further consideration should be given to the extent to which these assessments should be allowed. Those involved in the design, construction and inspection of buildings will be reliant on the expertise of the assessor and given the degree of subjectivity involved with these assessments there may be situations based on risk and consequence that their use should be banned rather than a reliance on the competency of individuals within certified organisations.

Such assessments will only be suitable for non-relevant buildings however consideration could be given to the banning of these in certain situations, for example in buildings that contain a sleeping risk.

## 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):

The proposals to review and update guidance and regulations pertaining to external fire spread is welcomed.

However Council is concerned that the guidance concentrates on the methods to achieve adequate fire resistance in buildings higher than 18m with potential proposals to cover 'relevant' buildings over 11m.

The Department through this consultation should reaffirm the requirement for adequate resistance to fire spread to be achieved in all buildings of any height or use.

The lack of clear guidance in this area will lead to confusion and inconsistency across NI where the industry will struggle to understand how to comply.