



Northern Ireland
Assembly

Committee for Finance

OFFICIAL REPORT (Hansard)

Consultation on the Building Regulations
(Northern Ireland) 2012: Building Control
Northern Ireland

3 February 2021

NORTHERN IRELAND ASSEMBLY

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Members present for all or part of the proceedings:

Dr Steve Aiken (Chairperson)
Mr Paul Frew (Deputy Chairperson)
Mr Jim Allister
Mr Pat Catney
Ms Jemma Dolan
Mr Philip McGuigan
Mr Maolíosa McHugh
Mr Matthew O'Toole
Mr Jim Wells

Witnesses:

Mr Tom Lavery	Building Control Northern Ireland
Mr Alan Mayrs	Building Control Northern Ireland
Mr Sean McConville	Building Control Northern Ireland
Mr Martin McCook	Building Control Northern Ireland

The Chairperson (Dr Aiken): I welcome Tom Lavery, Martin McCook, Sean McConville and Alan Mayrs. The session is being recorded by Hansard. Over to you, gentlemen, to give us your opening statement and evidence, please.

Mr Tom Lavery (Building Control Northern Ireland): Thank you, Chair, and thank you, members, for this opportunity to provide a briefing to the Committee. I am the current chair of Building Control Northern Ireland (BCNI). In addition to this oral briefing, we provided the Committee with a written statement to explain our position further and provide views on the proposed changes to the building regulations and associated guidance documents.

By way of a background summary, members will be aware that Northern Ireland building regulations are written by the building standards branch of the Department of Finance. Councils, through building control departments, are responsible for the enforcement of those regulations. Essentially, that is through a process of checking plans and documentation as well as inspecting construction works on-site.

In the early 1990s, building regulations in Northern Ireland moved, almost exclusively, away from prescriptive building requirements about how buildings should be constructed to more functional requirements in relation to how a building should perform. Whilst prescriptive requirements certainly bring clarity to our role and make compliance easier to police, we fully acknowledge that they can also

stifle innovation and public development, both of which are seen as major drivers towards more performance-based standards.

Under statutory law, each council can act independently in its enforcement role. However, to ensure uniformity and consistency in interpretation, as well as the application and enforcement of building regulations across Northern Ireland, the heads of building control meet regularly through the voluntary umbrella body, Building Control Northern Ireland. There are a number of BCNI working panels, one of which is the fire safety panel. Our response to the consultation and our written statement to the Committee were prepared by the fire safety panel in conjunction with BCNI.

Attending with me today are members of BCNI and the fire safety panel. At this point, I would like to introduce Alan Mayrs, from the fire safety panel, who will further explain our position and our views on the proposed changes.

Mr Alan Mayrs (Building Control Northern Ireland): Thank you, Tom, and thank you, Chair. There are five areas to which the consultation proposes change. I will provide comments on behalf of Building Control Northern Ireland on each area.

First is the new prescriptive regulation restricting the materials permitted on the external walls of relevant buildings over 18 metres. Building Control Northern Ireland considers the proposed restrictions for buildings over 18 metres to be the lower-risk option for that specific category of building. This proposed new route to compliance is based on limiting by law the materials that can be used on the external walls of a relevant building. For the purposes of this briefing, we will refer to that as the non-combustible route to compliance. This new regulation for relevant buildings will prevent the use of the existing route to compliance, which we will refer to as the limited combustibility route, and the use of large-scale system testing, which we will refer to as the testing route.

The proposed new requirement reduces the routes to compliance for relevant buildings over 18 metres to one mandatory approach. That is an almost unique position in modern building regulations, especially in fire safety provision, which usually have flexibility in how compliance with a functional regulation can be justified. The framing of the regulation in this manner will bring absolute clarity to how compliance must be achieved, especially where work on a relevant building has commenced prior to planning approval. For apartment buildings, the non-combustible approach further complements the "Stay put" philosophy embodied in the benchmark design standards for means of escape.

It is important that we acknowledge that the disadvantage from an industry perspective of that new one-route-only approach is that it leaves little scope for innovation, material selection or variation offered by the testing route.

Secondly, for non-relevant buildings over 18 metres, two routes to compliance are proposed: the limited combustibility route and the testing route. These are not mandatory solutions but are provided in guidance as the regulator's agreed methods by which a designer or contractor can justify compliance with the functional regulations. However, unlike the proposals for relevant buildings, there is no compulsion to follow one of these methods, and we see a slight weakness in that, which I will touch on shortly.

We welcome the proposed change in guidance for the route to compliance for non-relevant buildings over 18 metres, which is based on limiting the primary material on the external walls to materials deemed to be of limited combustibility. Current guidance in Northern Ireland extends restrictions only to the insulation materials and, theoretically, does not prevent the use of highly flammable cladding materials known to have caused rapid fire spread on high-rise buildings across the world. We also —.

The Chairperson (Dr Aiken): Sorry, Alan, will you say that part about Northern Ireland again, please?

Mr Mayrs: Yes. The current fire safety guidance in technical booklet E only restricts requirements. The presumption of compliance would be achieved by restricting the insulation materials in buildings over 18 metres to those with limited combustibility. It would not prevent the use of highly flammable cladding materials that have been used on buildings around the world and which have caused rapid fire spread.

The Chairperson (Dr Aiken): OK. Thank you.

Mr Mayrs: We welcome the acknowledgement of large-scale fire testing as an alternative approach to compliance in this category of building. There should be comfort for the Committee in knowing that following either of these two options to compliance would ensure that the system retrofitted to Grenfell Tower could not be approved for use in any non-relevant building over 18 metres in Northern Ireland.

We have concerns that the use of desktop studies for product substitutions in the tested route will still be permitted, as will justifying compliance by other means, given the legal flexibility that comes with the options for non-relevant buildings. We understand the benefit of desktop studies and the flexibility that they bring. However, we are of the opinion that there is sufficient scope for choice within the two routes proposed without having further flexibility for desktop studies or, indeed, any other method of justification. We consider that options for compliance should be restricted in non-relevant buildings over 18 metres by making the testing and limited combustibility routes the two sole mandatory options. Desktop studies rely on assumptions and opinion; fire safety needs assurance. In the provisions for sound transfer between dwellings, only the two solutions that the legislator is sure work, or has evidence that they work, are permitted. The question therefore has to be this: why not for fire safety?

The third proposed change is extending the restrictions proposed for relevant buildings to hotels. We do not have a strong opinion that the non-combustible route to compliance should be extended to hotels or any other non-relevant building. The fire safety design and means of escape philosophy in hotels is such that occupants are usually alerted to evacuate in the first instance of a fire. Hotels are not usually designed, constructed and managed on the basis of the occupants staying put or being subject to any progressive evacuation strategy, which is usually the case for the category of building subject to the non-combustible rule. External fire spread is still a key consideration for occupant life safety in hotels. However, there is, arguably, a higher standard needed for relevant buildings, especially an apartment building, to ensure that each individual apartment is maintained as a place of safety for a set period.

Clearly, there is a need to ensure that we never see again, in any type of building, a situation of such unprecedented fire spread as occurred in Grenfell Tower. However, in our opinion, as previously stated, on the basis of evidence and information that has come out since that fire, the combination of unmodified polyethylene aluminium composite material and the primary form of insulation installed on the tower would not comply with either of the proposed routes to compliance that would be applicable to hotels and other non-relevant buildings. We consider that requiring such improvement for all non-relevant buildings over 18 metres, including hotels, would make the proposed options mandatory, with no scope for justifying compliance by other means, including the use of desktop studies.

The fourth change proposed is the guidance provided for all other buildings under 18 metres. We consider the guidance on fire spread over the external walls of buildings under 18 metres to be insufficient, and this will lead to confusion across the industry. The proposed guidance clarifies for the first time that additional measures may be required in buildings under 18 metres, and these go beyond the limited restrictions that have historically been in place. However, it does not provide any rules or routes to compliance.

Through this consultation, the Department has established proposed mandatory rules for relevant buildings over 18 metres, which industry must follow, and proposed guidance for non-relevant buildings over 18 metres, which industry may use to validate compliance. However, in our opinion, further work is needed to provide similar routes to compliance, or other rules, for buildings that are under 18 metres, if these are deemed necessary, as this category covers the vast majority of buildings that we deal with in Northern Ireland.

The technical guidance provided by the Department on external fire spread is unchanged since the early 1990s. Other than restrictions on external surfaces, it has never contained any rules or restrictions for buildings under 18 metres. We can advise that, on that basis, no specific additional measures with respect to external fire spread have been required by building control departments across Northern Ireland in buildings lower than 18 metres since this time. Therefore, any new guidance needs to be clear and unambiguous, and it needs to consider routes to compliance for all buildings under 18 metres. A failure to be clear about what materials can and cannot be used on the external wall of a building that is under 18 metres will lead to inconsistencies in design and enforcement. Functional regulations rely on a detailed route to compliance, or rules, to achieve success, and the industry has not been provided with sufficient guidance in this regard for these buildings.

The Chairperson (Dr Aiken): Sorry, Alan, to come in here. Is it fair to summarise that by saying that, basically, we should have the same rules and regulations for above and below 18 metres?

Mr Mayrs: No, not necessarily. Historically, the fire safety rules that were considered were for buildings of a height at which firefighting was an issue. More recently, there have been fires in buildings of lower height, the Bolton fire specifically. The Government in England seemed to be slightly spooked by that, and they issued what was basically a diktat: measures needed to be in place for buildings under 18 metres, and functional regulations had to be applied. However, they did not provide any rules, routes to compliance or guidance; they left it with the industry.

The Chairperson (Dr Aiken): OK. Thanks, Alan.

Mr Mayrs: The last proposed change, and then we can take questions, relates to the height at which the higher restrictions for relevant buildings should apply. Unfortunately, we do not have any evidence to help to inform the decision on the height at which the non-combustible route for relevant buildings should apply. While we understand that the review of building regulations and fire safety in England did not conclude that a ban on combustible materials was necessary, the ban was implemented in 2019 and is now being proposed in Northern Ireland. Importantly, this decision does not appear to have been based on fire science; instead, it was a conscious political decision to move to a more cautious mandatory approach, which is the prerogative of the legislature. The cut-off point for which the new regulation has been set in England utilised the existing 18-metre threshold, a decision under the same review as in our consultation. Scotland has gone with 11 metres but allows for the alternative of testing.

The Chairperson (Dr Aiken): Why are the Scots going for 11 metres rather than 18 metres?

Mr Mayrs: I do not know. I was not party to the decision. My understanding is that they had meetings at legislature level and decided to go with 11 metres. I think that it probably ties in with the requirements for sprinklers, which I will come on to. In Scotland, there is a requirement for sprinkler provision in buildings down to 11 metres, so the two heights probably marry to a degree.

The Chairperson (Dr Aiken): OK. Thanks.

Mr Mayrs: There is, however, no clear scientific or research-based evidence to support either height, as is acknowledged by fire safety professionals and the legislatures. This debate needs to reflect the fact that we are the only part of the UK that does not require sprinklers in domestic apartment buildings of any height. Scotland and England now require them in apartments over 11 metres. We acknowledge that a line needs to be drawn somewhere, but, in this regard, there is no real evidence base for any decision on the threshold height at which the new regulation is implemented. Clearly, the proposal of 11 metres will extend the scope of the lower-risk approach for relevant buildings and will help to further support the means of escape provisions for apartments and the "Stay put" philosophy on which they are based. As previously stated, though, if there are now concerns about external fire spread on all buildings lower than 18 metres, we need clear rules and routes to compliance, not just a consideration of a ban on combustible materials for relevant buildings down to an agreed lower threshold height.

Thank you for your time. My colleagues and I are happy to take any questions that you have at this point.

The Chairperson (Dr Aiken): OK. Thanks very much indeed. We have a set of questions. Bearing in mind the comms difficulties, I want to go through some of those questions before I bring in other members. First, have Building Control NI's contacts in other parts of the United Kingdom indicated whether the changes to building regulations in other jurisdictions are understood by the industry, and are those proving to be enforceable by building control authorities in the rest of the UK?

Mr Mayrs: My understanding is that the non-combustible route to compliance for relevant buildings over 18 metres has brought clarity to the situation. Obviously, under the functional regulation previously, there were no limits to the routes that you could use to prove compliance to the regulator or the enforcer. That route has certainly brought clarity. There is, however, an opinion across the industry that there is, perhaps, limited flexibility, and such flexibility was provided by the large-scale fire testing route.

The Chairperson (Dr Aiken): OK. The Department appeared to suggest that it is a widely held view that what is built on a site rarely replicates what is tested in the laboratory through the BS 8414 test. Is that Building Control NI's experience? In other words, would it be sensible to permit the use of BS

8414 tests in order to establish fire safety compliance, given that, apparently, what is tested is not always what is used on the site?

Mr Mayrs: Perhaps that is a nod to the point about desktop studies. A system may be tested and deemed safe, but it is rare that the exact system goes on a building, because product substitutions are used. If a desktop study attributes the fire performance of a substituted product as being equal to the performance of the one in the tested system, the product may be replaced, and that would be accepted by the building control body. We think that that route should be avoided and that any system that goes on a building should be as per the system tested in the large-scale fire test.

The Chairperson (Dr Aiken): OK. Thanks. Building Control NI has referred to numerous industry validating systems that are designed to demonstrate compliance with fire safety regulations. Is it Building Control's opinion that those numerous systems and assessments in lieu of tests are generally unreliable and should therefore be proscribed?

Mr Mayrs: Sorry, will you repeat the question?

The Chairperson (Dr Aiken): Building Control has referred to numerous industry validating systems that are designed to demonstrate compliance with fire safety requirements. Is it your view that those numerous systems and assessments in lieu of tests are generally unreliable?

Mr Mayrs: No. If we look to what is in the Northern Ireland guidance, we see that there is one route to compliance, and that is to limit the combustibility of the insulation materials. Across the rest of the UK, there are probably two or three routes to compliance. England has the non-combustible route to compliance, the limited combustibility route to compliance and large-scale system testing. There is no evidence to invalidate any of those three routes to compliance. The issue that we have is with desktop reviews of tested systems or a fire engineered proposal from first principle. We have no issue with the non-combustible route that is in place in England for relevant buildings, the limited combustibility route that is in place for non-relevant buildings or the testing route. There is no evidence that those have been invalidated in a real fire scenario; if there is, we would be keen to see it.

The Chairperson (Dr Aiken): It has become apparent to the Committee as it has received evidence that there are multiple routes across the United Kingdom. We are not experienced in this area and are just gathering evidence, but it seems strange that there are multiple fire safety scenarios in the UK. One would have presumed that the ALARP — as low as is reasonably practicable — principle to risk would have been applied to the approaches. You say that there are three different systems. What should we recommend? Should we be looking at one system? I cannot get to the bottom of why we have three different approaches.

Mr Mayrs: The existing routes to compliance involved testing. There was large-scale system testing, and materials that were of limited combustibility were used. That has been the route to compliance in England for several years. The difficulty that England faced was that, after Grenfell, there was a bit of a backlash about the regulations and how the limited combustibility route was framed in guidance. As a result, England decided to go with the most cautious approach for highest risk buildings, which is the non-combustible route to compliance. There was a review of building regulations and fire safety in England by Dame Judith Hackitt, who did not conclude that that was necessary or that there was any specific issue with the existing routes, provided that the rules were clarified. However, England decided to go with non-combustible class A1 and A2 products for relevant buildings, namely those in the highest risk situation.

There are two remaining systems for all other buildings over 18 metres. The reason why there are two is that the testing route gives you flexibility to combine combustible materials. For instance, polyisocyanurate (PIR) insulation and polyurethane (PUR) insulation could be tested in assembly and deemed safe, whereas they would not pass the limited combustibility rules. So, if you limit that to just one rule and it has to be on combustibility, only one insulation on the market will meet the standard for limited combustibility or non-combustibility. So, the testing route gave the industry flexibility for product variation and selection, and it kept the scope for innovation. England decided to go for the more cautious approach for the highest risk buildings, which is why they moved the relevant buildings to the non-combustible route.

The Chairperson (Dr Aiken): OK. Do any other members want to come in? Is there anybody out there?

Mr Catney: I am sorry; I missed a little bit of that. Will there be any short- to medium-term consequences for existing buildings not currently subject to alteration or change?

Mr Mayrs: No, any new proposal that comes from this consultation will apply only to new buildings and buildings that have undergone a material change of use. We find that the industry, when renovating buildings, picks up on new standards. Although I have said that our current guidance is weak, the industry, generally, has not exploited that. It has tended to follow the routes to compliance that have been in place in other parts of the UK for several years. Any new requirement will not apply to existing buildings. However, existing buildings probably, in the main, comply with the rules that have existed in England for some time.

The Chairperson (Dr Aiken): Sorry, will you say that again? The industry believes that the current regulations in Northern Ireland are weak. Did I pick that up correctly?

Mr Mayrs: I work for Belfast City Council. In the last three years, 25 buildings over the 18-metre height threshold have been built in Belfast. None of the buildings has exploited the fact that they could have been built with insulation materials of limited combustibility. They have looked to the large-scale fire tests and desktop reviews of the cladding systems. In the main, large-scale fire tests have been used to validate systems in Northern Ireland.

The Chairperson (Dr Aiken): Basically, even though the rules and guidance in Northern Ireland are relatively weak, the industry here, because it is used to building in Manchester and London, builds to the same standard as is required in England or Wales?

Mr Mayrs: Yes.

The Chairperson (Dr Aiken): Again, that raises this question: if the industry here is building to the same standard as England and Wales, why are we not following the standards of England and Wales?

Mr Mayrs: That is a good question. I do not know the answer. Historically, we follow, after some delay, the system in England. Since 1973, we have followed the English system of guidance and regulation. Our current proposals are based on the English system, and that is why there is a move to the non-combustible route, bringing in large-scale fire testing for the first time and clarifying that the rules for limited combustibility extend to the cladding materials as well as the insulation materials. We are clarifying that now.

The Chairperson (Dr Aiken): OK. Thank you very much.

Mr Catney: Alan, on whom do Building Control NI and building control departments rely for alterations to buildings? Will you rely on contractors to do the alterations or will you rely on the documentation?

Mr Mayrs: The responsibility for compliance with building regulations rests with the contractors carrying out the work, the designers and the owners. The council is the enforcer and takes the enforcement action. We make enquiries into compliance. They are responsible for the compliance, and we enquire into that.

The Chairperson (Dr Aiken): Do any members have a further question? Finally, what other related changes to the law would Building Control NI like to see to improve compliance with fire safety requirements?

Mr Mayrs: I will let my colleagues come in at some point. There is no one issue that we specifically want to raise. It would be useful to have a general discussion on fire safety and to look at how our technical guidance documentation compares with that in England, Scotland and the Republic of Ireland, with a view to improving our regulations and guidance so that they are up to speed with other parts of the UK and the island of Ireland.

The Chairperson (Dr Aiken): Sorry, are we not doing that now?

Mr Mayrs: Sorry?

The Chairperson (Dr Aiken): Is that not being done now?

Mr Mayrs: There are other issues. We have no sprinkler provision in domestic residential buildings of any height. Wales, for example, has domestic sprinkler provision in all houses, and Scotland has sprinklers in residential buildings down to a height of 11 metres. There are issues with our means of escape codes. We still refer to outdated means of escape codes for residential buildings. Therefore, there are fire safety issues that we can improve across all our regulations and guidance. The five fire safety regulations include those on means of escape, internal fire precautions and external fire precautions. All need to be reviewed in light of what is happening in other parts of the UK.

The Chairperson (Dr Aiken): Thank you very much. Will you write to the Committee outlining your issues and recommendations? We will pass those on to the Department as well.

Mr Mayrs: Before we finish, I want to make you aware that we have regular meetings with the Department to discuss that type of issue. Tom, as head of service, may want to come in on that.

Mr Lavery: Yes. As Alan said, we meet regularly with the Fire and Rescue Service and other organisations to discuss those issues, and there are five different elements to fire safety alone. The latest consultation focuses on just one. If it would be of assistance, we can write to the Committee, by all means, to give you a feeling of the kind of thing that we discuss.

The Chairperson (Dr Aiken): Yes, please. Do members have any other questions? Tom, Martin, Sean, and Alan, thank you very much for your time. Please, keep safe.