Northern Ireland Assembly

Committee for Finance

OFFICIAL REPORT (Hansard)

Consultation on the Building Regulations (Northern Ireland) 2012: Department of Finance

9 December 2020

NORTHERN IRELAND ASSEMBLY

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Members present for all or part of the proceedings:
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 Billy Black	Department of Finance
Mr Damien Fairley	Department of Finance

The Deputy Chairperson (Mr Frew): I welcome Billy Black, principal professional technical officer and head of building standards branch, and Damien Fairley — I hope that I said your name right — senior professional technical officer in the building standards branch. You are very welcome to the meeting.

I am standing in for the Chair, just in case you think the Chair has done something with his hair. The Chair cannot make it today, so you are stuck with me. Thank you very much, Billy and Damien, for attending the meeting which is on what we class as the serious subject of the ongoing consultation. If all members are content, I will ask Mr Black to make an opening statement to the Committee.

Mr Billy Black (Department of Finance): Thank you, Chair. Good afternoon, Chair and members. My name is Billy Black. I am here with my colleague Damien Fairley to provide oral evidence to the Committee on the recent consultation on the proposed amendments to the Building Regulations (Northern Ireland) 2012.

Damien and I work in the Department's building standards branch, which has responsibility for several pieces of building regulations-related legislation. The most notable and relevant of those is the Building Regulations (Northern Ireland) 2012 as amended. The proposed consultation is about amending that particular statutory rule (SR). The branch is also responsible for the Building (Prescribed Fees) Regulations (Northern Ireland) 1997, which is about the fees that councils can charge for providing building control services. Both statutory rules were made under the powers that are conferred by the Building Regulations (Northern Ireland) Order 1979, which is the applicable primary legislation.

As acting head of building standards branch, I have an overall management role across the branch's three units. Damien manages building regulations unit 1, which has responsibility for a number of parts of the building regulations, including fire safety and rating. Those are considered in the consultation.

We provided a briefing document that includes a summary of the responses for the Committee to consider. The document contains a briefing in the executive summary and the background and introduction to the proposals section.

By way of further background, a building regulations work programme was agreed in December 2019 at the same time as the Northern Ireland Building Regulations Advisory Committee (NIBRAC) was being re-established. NIBRAC continues to exist under article 4 of the 1979 Order:

> *"to advise the Department upon the amendment of building regulations and upon any matter arising out of or connected with the amendment or operation of building regulations which may be referred to the Advisory Committee by the Department."*

The work programme was to be implemented through a number of amending statutory rules. Fire safety matters relating to an effective ban on combustible materials, assessment in lieu of tests and radon issues are to be prioritised in the first SR. Work started with NIBRAC and its technical subcommittee in January 2020, and the proposals were scoped out and are the subject of the consultation, which opened on 14 August and closed on 9 October. The branch welcomes the views of the Committee, which, together with the consultation responses, will be brought back to NIBRAC to inform the next phase of the consultation analysis. Thank you, Chair.

The Deputy Chairperson (Mr Frew): OK. Thank you very much, Billy, for that. Damien, do you want to add anything at this point, or will we go straight to questions?

Mr Damien Fairley (Department of Finance): I will give you a brief overview of the responses to the consultation. The Department received a total of 43 responses: 42 were technical, and one was not technical. The breakdown of those 42 responses is as follows — all this is in the report that was sent to you — 11 were from the councils; 24 were from the industry, mainly made up of product manufacturers and their associations; five were from professional bodies, including the Royal Society of Ulster Architects (RSUA), the Royal Institution of Chartered Surveyors (RICS), the Chartered Association of Building Engineers, (CABE), the Chartered Institute of Architectural Technologists (CIAT) and the Royal Town Planning Institute (RTPI); one response was from the Northern Ireland Fire and Rescue Service (NIFRS); and one was from the Fire Brigades Union (FBU) in London.

Two major points came out of the consultation. The first was about the use of the large-scale BS 8414 test. Under the proposed new regulation 23(2) in Part B of the building regulations, the materials that are used on the external walls of relevant buildings will have to achieve A1 or A2-s1, d0 performance classification. Combustible products cannot achieve that classification and hence cannot be used on the external walls of relevant buildings. Combustible materials can pass the large-scale BS 8414 test when they are in combination with other suitable materials.

Quite a proportion of the respondents were not happy with the new regulation and wanted the BS 8414 test to be acceptable in all situations. We therefore propose to allow the BS 8414 test for non-relevant buildings above 18 metres. As for relevant buildings, which we see as higher-risk, such as blocks of flats, hospitals, care homes, nursing homes and student accommodation, all with a floor over 18 metres, we are saying that the only route to compliance is to fit non-combustible materials of either A1 or limited combustible materials of A2-s1, d0 classification. The BS 8414 route to compliance will not be allowed for those buildings.

The other major issue that came out of the consultation was the guidance that we proposed in technical booklet E for non-relevant buildings. We tried to put in a paragraph to re-emphasise that regulation 36, which deals with external fire spread requirements, applies to buildings of all heights, not just those over 18 metres in height. Since Grenfell, there has been a perception that it applies only to high-rise buildings over that height, but that is not the case. There was a serious fire this time last year in student accommodation in Bolton. The top-storey height was 17·8 metres, so it was just below the 18-metre threshold. The building was wrapped in a cladding material of highly flammable high-pressure laminate (HPL) panels. The Fire and Rescue Service and the councils, in their responses to us as part of the consultation, made it clear that they are not happy with the guidance that we proposed on that. They would rather see specific performance classifications specified below 18 metres in the same way as they are specified for buildings that are over 18 metres.

Those are the two major issues, from our point of view, that came out of the consultation. There were a lot of other little bits and pieces, but those are the two main points that we would like to get across to you today and that we need to address. Thank you.

The Deputy Chairperson (Mr Frew): OK, Damien. Thank you very much. You raised the ban on combustible materials and the argument for the BS 8414 test. Some of the respondents came through saying that they are in favour of large-scale testing in order to assess the performance of the external cladding in its entirety, but are you saying that, if the material were tested on a large-scale setting or rig without any of the other material that surrounds it in the built form, it would fail those tests too?

Mr Fairley: Yes. There is the possibility that, if it is combined with other products or materials of a combustible nature, it will fail, but there also is the possibility that it will pass the 8414 test if it is combined with other materials of a non-combustible nature or of a limited combustible nature. It all depends on what it is combined with. That is the nature of the 8414 test. It is a large-scale test that tests the combination of materials, as opposed to the small-scale tests, which test the materials in isolation.

The Deputy Chairperson (Mr Frew): Realising that this is a very serious issue and that the consultation has occurred because of horrendous situations that led to deaths, what is wrong with testing a material alongside other materials that are used with it in the built form? Is that not still a way of providing fireproofing and testing the built form?

Mr Fairley: There is nothing wrong with that. The 8414 test is an honest test, with the intention of demonstrating how products perform when in combination. As far as we are concerned, there is nothing wrong with the 8414 test. It is a robust test that is used all around the world. When I say that it is robust, I am hinting that the wooden crib that is used as the fuel source generates a 4·5 megawatt fire, which is more than adequate. The height of the wall is 9 metres, which is higher than that in any other similar test around the world. The performance criteria to pass the test, which are set in BR 135, are quite stringent, hence why some people feel the need to cheat in order to pass the test. They do that because the performance criteria are so stringent.

We have two issues with the test. First, the major one is that it is a widely held view that what is built on-site never replicates what is tested in the laboratory. It only takes someone to deviate from what has been tested in the laboratory, using different fixing screws, to render that test null and void. What has to be built on-site has to replicate the test precisely, down to the last screw that is fitted. That is a problem, because we all know what goes on in construction sites on a Friday afternoon when guys are rushing to get things done and are told, "Just put that up". They will lift the nearest tools and fit something without having the proper measures in place.

The other concern is the recent revelations from the public inquiry into Grenfell that people are manipulating the test and the results from it. However, that does not take away from the nature of the test. As far as we are concerned, it is a robust test, and testing things in combination is a good test in the context of testing. Testing also has its limitations. No test, whether small-scale or large-scale, can replicate a real fire scenario. Tests are used to compare how products perform in test conditions, but test conditions are never replicated in the real fire scenario. It is a bit like Boeing testing jet engines on the ground for hundreds of hours. Once you put them up in the air, it is a totally different ball game with the conditions and so on.

The Deputy Chairperson (Mr Frew): Thank you very much for that answer. It was very informative. I hear what you say about the building site. I was on building sites for 20 years, so I get that. You and I could tell quite anecdotal stories about such things. Is there real science data about that, or can we not determine or prove that the tests are being held as rigorously as possible? I get the point about every screw needing to be in the same place on a building in order to make it fully replicated. How could you go about adding rigour and certification to that test in order to make it more authentic and reliable?

Mr Fairley: You could argue that that is a role for enforcement. In Northern Ireland, that responsibility falls to the councils, but they cannot be on-site 24 hours a day, seven days a week. You have to put the onus on the people who are carrying out the work. The contractors, designers and building owners have to be made responsible for what is built on their sites. At the minute, there is talk of major change to the construction industry through the Hackitt recommendations in England. Until we arrive at the point where checks and balances are put in place, I will not be so sure about trusting the outcome and

the application of the 8414 test. However, I reiterate that the test is a good, honest and robust test for testing materials in combination.

The Deputy Chairperson (Mr Frew): Some presenters to the Committee suggested that the test be independently run by a fully accredited test body. They cited a couple of places in Northern Ireland where tests are being held. Would that instil confidence in the Department that it would be done completely and properly?

Mr Fairley: I am not too sure about that. This might sound a bit strange, but our understanding of large-scale tests, certainly those that occurred with the Buildings Research Establishment (BRE) and Celotex in England, is that the actual wall, as opposed to the test house, that is tested is built by the test sponsor carrying out the test, and the test sponsor — who is, basically, the product manufacturer — tells the test sponsor what they have built. There is, therefore, an element of trust there before the like of BRE carries out a large-scale test. There is a lot of validity in the test houses being United Kingdom Accreditation Service (UKAS)-accredited, because their procedures are audited. The Department puts a lot of the onus on UKAS accreditation. Perhaps Billy wants to comment further on that and on how the Department feels about it.

Mr Black: As Damien said, it boils down to trust in the test. England is bringing in a new regulatory regime. It is bringing in a building safety regulator under the Health and Safety Executive and changing the way in which its regulatory regime works. It will have a separate regime for high-rise, high-risk buildings and there will be a focus on the competence of designers, for instance, and building control, building control officers and approved building control bodies so that the risk of the system being gamed or misunderstood will be reduced. When that happens, it will be interesting to see whether England rolls back from the ban that it introduced in 2018. Having talked to the Ministry of Housing, Communities and Local Government, I learned that it has reviewed the ban.

I think that the submission on that is, again, with the Ministers at the minute, so we are waiting to see the results of the review of the ban in England. You may also be aware that that considered a reduction in height from 18 metres to 11 metres and widening the scope of the relevant buildings to include hotels and some other buildings. Therefore, it would be interesting to see what that position will be, and it will probably be considered in the totality of the public inquiry and the work that is moving forward on the Hackitt recommendations.

The Deputy Chairperson (Mr Frew): Does building control have a role in ensuring that what is built complies with the specifications on testing?

Mr Fairley: Building control tends to accept the documentation that is received, which is sent to it by the people who are installing the structure. If there is the appropriate certification, it will take those certification documents on board, and that will be its way of assessing whether the structure has been built appropriately —

The Deputy Chairperson (Mr Frew): OK, thank you very much.

Mr Fairley: — and meets the test.

Mr McGuigan: Thank you very much for your presentation; it was very useful. I was beginning to scratch my head halfway through it when you were talking about how good the test was. I indicated to speak, and then you obviously clarified that the testing is very good but that the application on-site that is less good. I would probably take a different tone than the Chair and say that this is not anecdotal; we are hearing from the inquiry, revelations and emails that some of the things that happen on-site are much more than anecdotes.

You were saying that the test can happen and can be perfect but that on-site even things like screws or fixings can have an impact on it. We heard the converse view last week from some of the industry representatives — I hope that I get this right, because it is a bit complicated — as they seemed to say that the tests for non-combustible materials were done in such small quantities that there was no guarantee that, if something tested as non-combustible, it would still be non-combustible if it was combined with other materials. I think that I am quoting what they said correctly, so it would be interesting to hear your viewpoint on that.

As a second point, we are talking here about what is happening in England and Wales and in Scotland, but a lot of the builders, construction companies and the firms that make those materials on this island are probably working close to the border or are building in the North and South. Therefore, it would be interesting to know how the regulations are in the South at the minute and the impact there might be on those.

Mr Fairley: The building regulations and the guidance in the South are exactly where we are at the minute, prior to the changes being made. Therefore, buildings that are over 18 metres in height require the products to be of limited combustibility, so they have to be in class A2-s2, d3. It is important to realise that, in the class of A2, which is the limited combustibility class, there are nine categories ranging from A2-s1, d0 down to A2-s2, d3. The difference between the nine is the amount of smoke production and flaming droplets that are produced during the small-scale tests. We are specifying for relevant buildings is the highest limited combustibility class of A2-s1, d0. We are not aware of any situation where a combination of A1 or A2-s1, d0 products have failed a BS 8414 test. I got the impression that the witnesses last week were indicating that there were examples where A2 materials, limited combustibility products, failed the large-scale BS 8414 test, as if it were a more onerous test. I get a sense that what they were pointing to are the other categories of A2 products, as opposed to the A2-s1 d0, the highest class of product in the A2 range.

In answer to your first question about non-combustible products failing the BS 8414 test, we are not aware any combination failing that test. The South is now in the same position as ourselves. You could argue that we do not have the density of high-rise buildings to be affected in the way that England and Wales are. However, we did come under pressure to do something regarding this matter, and we felt that the most appropriate way to go was to follow what England and Wales had brought in.

Mr McGuigan: Everybody, quite rightly, came under pressure after Grenfell to look at that. You are saying that you are confident that this is not a knee-jerk reaction to pressure but a sensible approach that will make buildings safer for the people who inhabit them.

Mr Fairley: Whether we take the England and Wales approach or follow the Scottish approach, both make buildings safer because you are increasing the performance classifications for the materials used on external walls.

There is a balanced approach to be taken here in introducing the ban for relevant buildings only and allowing the BS 8414 large-scale test for other, non-relevant, buildings. However, both approaches are making buildings safer.

Mr Black: We are talking about testing, but, as I said in my opening comments, there are also what are known as assessments in lieu of tests for desktop studies. There was a perception that what was happening across these islands was that the system was being gamed. In effect, you tested a make of system and somebody was then paid to do a desktop exercise and decided, "Well, we'll swap that bit out and we'll put that insulation in. We'll swap that screw out and we'll put this screw in".

However, there is a movement, and in our proposals, to ensure that that is tightened up. There is now a new standard to govern and make people aware what is and is not appropriate to swap out. As well as a problem with construction on-site, the danger in the past could have been an actual test being gamed in the sense that what you were provided with was a test certificate and then an assessment in lieu of test, which states that, although this is not exactly what was tested, it is OK anyway. That was an extremely dangerous situation.

Mr McHugh: Tá fáilte romhaibh. You are very welcome, and thank you for your presentation.

It must be difficult to have a truly independent test. The Committee heard a lot about testing last week, yet when some companies had the results of testing, they chose to ignore them. Eventually, that would have put lives at risk.

You talk about replicating a situation. I find it difficult to see how one could replicate a location, depending on the height of the building and so on, where a location in itself would give rise to conditions that could encourage combustible materials to take over the building. How do you feel about that in relation to testing? Is it a case of saying that testing is so imperfect in many ways that, really, the safest approach for us to adopt is a blanket ban on combustible materials?

Mr Fairley: Yes, there is an argument for that. As I said earlier, testing is not intended to simulate a real fire. It is simply a means of comparing the performance of one product with another under the same test conditions. Setting that type of benchmark eliminates products that are manifestly not safe in the first place.

The small-scale tests, which the A1 and A2 classifications will be based on, are used around the world. They are not just European standard tests; they also have ISO recognition. There is an element of safety and of comfort blanket to them, so that if you introduced a ban on the higher-risk relevant buildings, what you are saying is that the only products that you can use, bar the exemption list, is products that are A1 or A2-s1 d0. You are right that testing is an imperfect way of guaranteeing safety, but it is the only one available to us.

Mr McHugh: In addition to that —.

Mr Black: Chair, may I add to that? The issue with testing is that you always have a tension between how repeatable the test is — it needs to be able to be repeated so that a number of tests can be achieved — and how representative it is of the real-life situation. This is found across the whole of society. I worked in the aircraft industry where we simulated bird strikes on aircraft wings. Believe it or not, the test was firing dead chickens at the wings of planes. It was repeatable and it was representative. However, how representative is it? That is the question. In my opinion, it is about how representative the test is.

Mr McHugh: Has consideration been given to the economic consequences on the construction industry in relation to either the use of testing and its conclusions and whether they are implemented or not, and/or the use of non-combustible materials, which apparently are not that readily acceptable on the island of Ireland?

Mr Fairley: Our impact assessment estimated that this would affect three buildings per year in Northern Ireland. We did not see that as a big impact on the industry. I have heard comments that it will be applied to a broader range of buildings than just the relevant buildings.

That has always been the way with building regulations. They set minimum standards for life safety purposes. If people choose to apply the regulations to a broader range of buildings than what they actually apply to, that is their choice, and they might be doing it for very good reasons, such as property protection in the insurance industry. As I say, building regulations are set for minimum standards only. The impact of this, if applied at a height of 18 metres, would affect three buildings a year in Northern Ireland, so it is a low impact.

Mr McHugh: You mentioned 18 metres. The Fire Service recommends 11 metres, as that is the only height at which they can tackle a fire effectively.

Mr Fairley: That is a critical comment for us. Some people think that all consultation responses count the same and that it is a game of numbers, but what the Fire and Rescue Service says matters a lot to us. They are the only people who actually fight fires; the rest of us just talk about this stuff. Therefore, when the Fire and Rescue Service tells us that 11 metres should be the upper height threshold because, above that height, it has issues with external firefighting techniques, we have to take that on board and consider it very seriously.

Mr McHugh: I agree with you entirely on that.

Ms Dolan: Thanks, Billy and Damien. The Fire and Rescue Service raised concerns about the decision not to include hotels and hostels in the ban. Is that the minimum recommendation? What was the rationale for excluding those buildings?

The ban affects only new buildings or buildings that have been repurposed. Why was the legislation not retrospective to include all relevant buildings? Does that mean that some buildings now present a high risk?

Mr Fairley: Hotels, hostels and boarding houses, like domestic buildings, have a sleeping risk; however, they are a more managed type of premises with a different evacuation strategy. Therefore, there were a lot of reasons. Many people argued that their buildings had less risk because they are a more managed type of premises that are subject to fire safety legislation, which involves fire risk

assessments. The Fire and Rescue Service is the body that enforces those assessments. The evacuation strategies in hotels, hostels and boarding houses are different. They are well managed, with full fire alarm systems, good signage and 24-hour reception: someone is always awake to raise the alarm. They do not have a stay-put policy, which is in play in a lot of domestic-type residential blocks of flats.

Under the guidance changes, there will be a minimum performance classification, A2-s2, d3, which is a limited combustibility class of materials, including the cladding and insulation used on buildings over 18 metres in height.

Lastly, Home Office statistics indicated that deaths in domestic residential-type buildings are three times higher than those in other residential-type buildings with a sleeping risk, such as hotels. That was the reason for excluding them.

As part of the consultation, we asked whether people felt that they should be included. The responses are pretty much evenly split between those who are favour of including them in the ban and those who argue for keeping them out of the ban. It is one of those issues that we have to take back to NIBRAC and the technical subcommittee for discussion. Again, the comments of the Fire and Rescue Service will carry a lot of weight.

Your second question was about applying the ban retrospectively to existing buildings. That is not in the gift of building regulations. There is a common misunderstanding that building regulations apply to buildings. They do not; they apply to building work. Building regulations kick in only when you carry out building work: the erection of a new build, the extension of an existing building, alterations to an existing building, or where a building goes through a material change of use. That is why we cannot apply them retrospectively. It is not in our gift.

Ms Dolan: Thank you.

The Deputy Chairperson (Mr Frew): Do any other members want to come in on that issue? Sorry, Pat, of course; you had indicated.

Mr Catney: Thanks very much, Billy and Damien. On the responses, there were concerns about the time allowed to look at the new regulations and training for professionals and the proposed changes if they do come in. Does the Department have a view on whether there is sufficient time or whether it is necessary to have an extended period?

Mr Fairley: Due to the seriousness of the matter, Pat, we were thinking of making a statutory rule at the end of the year and trying to bring it in within three months. However, given the nature and complexity of the responses, we need to go back to NIBRAC and the technical subgroup to discuss most of those matters.

Two of the respondees — the Construction Employers Federation (CEF) and the National House Building Council (NHBC) — pointed out that we would need a longer lead-in time between making the law and bringing it into operation than what we had planned. They put it to us that it should be at least six months. We need to think about that and discuss it with the technical subgroup for part E on fire safety.

Sorry, what was the other part of your question?

Mr Catney: You have probably covered it. It was about whether we would extend the time to give professional people who are trying to monitor this more time to train. You have probably answered it.

Damien and Billy, I know that you have looked at England and Wales. Did you think of tailoring it in such a way that it was Northern Ireland-based? Is there a case to be made for tailoring the regulations for, let us call it, our home-based market in Northern Ireland?

Mr Fairley: There is, yes. Building regulations are a devolved matter. You are free to make whatever regulations and guidance you wish for the citizens of Northern Ireland. There is nothing in the rule book that says that we have to follow what England, Wales or Scotland do. Since the early 1970s, when building regulations were first brought in, we have relied heavily on the research that our counterparts in England carry out. They spend a lot of money on research and base the changes on evidence. We use that evidence to make similar, if not the same, changes here. If you want to deviate

from that and do your own thing, it may leave you a little bit exposed in the future if England decides to change something again and you cannot follow that because you are not in the same position to do so.

Mr Catney: I am sure that you looked at the best option, but why not follow Scotland? When you measure them, why not just take them from Scotland rather than from England or Wales? There has to be a reason. Are you saying that one is better? What is the model in Scotland?

Mr Fairley: Scotland has gone down the guidance approach and allowed the BS 8414 test for all buildings, but we are hearing that they will look at that again, so there is no guarantee that Scotland will stick with its current position. The Minister there is coming under huge pressure from MSPs and the media to introduce a ban similar to the one in operation in England and Wales. There is nothing to stop us following what England does; there is nothing in the rule book that says that we have to follow what England does. Wales tends to follow what England does, and, traditionally, so have we since the introduction of building regulations in the 1970s. I do not know whether Billy wants to comment further on that.

Mr Black: Yes. We try to use England as a starter for 10, and then we consider it in the local context. For instance, in the past, there have been occasions when we have examined proposals that have been due to come in in England, and the councils' building control or the Fire and Rescue Service were uncomfortable with them, and therefore we did not implement them here. They tend to be smaller rather than strategic differences.

I was looking at the Republic of Ireland regulations today. Our part E here on fire safety is England's part B, but it is also part B down South, so, in a sense, the structure of the regulations in the South is slightly more in line with what England and Wales has than what we have.

I cannot really say that about the content. England is, through its Building Regulations Advisory Committee (BRAC), going to examine and carry out a complete review of its fire safety guidance. BRAC has commissioned a number of research projects, one of which is on heights, which we talked about earlier. We will be able to pick up on that research and discuss it locally. When we discuss it with NIBRAC, we are discussing it with the technical subcommittee, which includes the council building control, the Fire and Rescue Service and the Housing Executive, so it includes key stakeholders who deal with fire safety in the Province.

Mr Fairley: One example of that, Pat, is that, in dwelling houses, we require a higher fire alarm standard than is asked for in England. In England, in a typical dwelling house, they ask for smoke detection in the circulation area and that is it; whereas, here, we ask for smoke detection in the circulation area, smoke detection in the principal habitable room — your main living room — and a heat detector in the kitchen. That came about through our taking the England product and putting it through the NIBRAC consultation process here, and we decided to apply a higher standard here.

The Deputy Chairperson (Mr Frew): There are no further questions from the Committee. Billy and Damien, thank you very much for your time and your answers to our questions.

Mr Fairley: Thank you, Chair.

Mr Black: Thank you, Chair.

The Deputy Chairperson (Mr Frew): All the best.