



Fire & Risk Solutions Ltd.
Chartered Engineers
Professionals in Fire and Safety

Report 3169

An Bord Pleanála Appeal regarding the attachment of Condition by Dublin City Council to grant of Fire Safety Certificate for proposed material alteration to existing apartment layout including conversion of attic space to provide additional bedroom space at Apt. 38, Block B, Bellevue, Island bridge, Dublin 8.

Client: An Bord Pleanála,
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BUILDING CONTROL ACT, 1990 – APPEAL

FIRE SAFETY CERTIFICATE APPLICATION FOR PROPOSED MATERIAL ALTERATION TO EXISTING APARTMENT LAYOUT INCLUDING CONVERSION OF ATTIC SPACE TO PROVIDE ADDITIONAL BEDROOM SPACE AT APT. 38, BLOCK B, BELLEVUE, ISLAND BRIDGE, DUBLIN 8.

APPEAL AGAINST THE ATTACHMENT OF CONDITION NO. 2 TO FIRE SAFETY CERTIFICATE (REF. FSC1320/17) ON 22nd FEBRUARY 2017

AN BORD PLEANÁLA APPEAL REFERENCE 29B.FS0555

Local Authority: Dublin City Council

Appellant: Mr. Brian Patten and Ms. Emer Butler

RECOMMENDATION

In my opinion, the Board may rely on Article 40(2) of the Building Control Regulations and consider the subject appeal on the basis of Conditions only. It is recommended that this appeal be upheld.

The subject Condition No. 2 attached to the Fire Safety Certificate as granted by Dublin City Council (under Reference FSC1320/17) on 22nd February 2017 should be removed.

The remaining 2 no. Conditions (Conditions No.'s 1 and 3) attached to the granted Fire Safety Certificate are not subject of this appeal and should remain.

The granted Fire Safety Certificate should therefore remain subject of 2 no. Conditions.

Dr. Raymond J Connolly

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1. RELEVANT INFORMATION

- i. Application for Fire Safety Certificate by Mr. Brian Patten and Ms. Emer Butler c/o FCC Fire Cert Ltd. to Dublin City Council dated 27th October 2016.
- ii. Compliance Report FCC 16024 (dated Oct. 2016 – Revised 25th Jan. 2017) by FCC Fire Cert Ltd. and associated drawings.
- iii. Fire Safety Certificate (FSC1320/17) granted by Dublin City Council issued on 22nd February 2017 (subject of 3 no. Conditions).
- iv. Letter of appeal from Mr. Brian Patten and Ms. Emer Butler c/o FCC Fire Cert Ltd. to An Bord Pleanála dated 14th March 2017.
- v. Letter from Dublin City Council to An Bord Pleanála dated 6th April 2017 including observations of Fire Authority.
- vi. Letter FCC Fire Cert Ltd. to An Bord Pleanála dated 1st June 2017 responding to Fire Authority comments.

2. BACKGROUND

FCC Fire Cert Ltd. on behalf of Mr. Brian Patten and Ms. Emer Butler made an application to Dublin City Council for a Fire Safety Certificate for a proposed material alterations to an existing apartment layout including conversion of attic space to provide additional bedroom space at Apartment 38, Block B, Bellvue, Islandbridge, Dublin 8.. The Fire Safety Certificate was granted by Dublin City Council (under Reference FSC1320/17) on 22nd February 2017 subject to 3 no. Conditions including *inter-alia*:-

Condition No. 2

The dwelling unit that is subject of the application is to be provided with a Category 2 sprinkler system conforming to BS 9251:2014 or equivalent.

Reason:

To comply with the provisions of Part B1 of the Second Schedule to the Building Regulations, 1997 to 2014.

On 14th March, FCC Fire Cert Ltd on behalf of Mr. Brian Patten and Ms. Emer Butler appealed to An Bord Pleanála against the attachment of this Condition (Condition No. 2) to the Fire Safety Certificate. The residual Conditions (Conditions No.'s 1 and 3) are not subject of the current appeal.

3. REPRISE OF APPEAL (AS PRESENTED)

The subject works comprise the proposed material alteration of an existing single level flat to include conversion of the attic space to bedrooms. The new upper bedroom level is to be accessed by a protected stairway from the existing entry level flat and to exit onwards into the common parts (unchanged by the proposed works). It is proposed to enhance the automatic fire detection and alarm system to a type LD1 system as per IS 3218:2013.

Given that the subject flat sits more than 4.5 metres above external ground level, the appellant has sought to demonstrate compliance with Part B1 to the Building Regulations through adoption of the design guidance contained in Clause 9.5.2(c) of BS 9991 *Fire safety in the design, management and use of residential buildings – Code of Practice*, British Standards Institution, 2015. The appellant proposed to install a protected stairway enclosure to access the new bedroom level together with a Type LD1 fire detection and alarm system. It is noted that the BS9991 standard references BS 5839:Part 6:2013 for specification of fire alarm systems whilst the appellant has adopted standard Irish practice of specifying IS 3218:2013 in lieu of same.

The Fire Authority traces the evolution of guidance from BS 5588:Part 1:1990 through to its replacement BS9991:2015 noting in particular the changed advice regarding flats over more than one storey, i.e. a maisonettes or duplex/triplex units. In the relevant Clause 10.4(b)(2) of BS 5588:Part 1, it is advised that the habitable rooms at the upper level(s) should be accessed from a protected stairway and that there should be an alternative exit from the flat at the upper level(s), i.e. a second exit from the flat on the level other than the entrance level.

The Fire Authority take the view that the change in guidance between the original Clause 10.4(b)(2) of BS 5588:Part 1:1990 and its successor Clause 9.5.2(c) of BS 9991 with regard to omitting the second exit from the flat is subject of the compensatory effect of the inclusion of Type LD1 automatic fire detection as opposed to Type LD2. In the context of BS 5839:Part 6, this enhancement is manifest as the increased requirement to provide automatic fire detection in all bedrooms. In Ireland, IS3218 requires detection within bedrooms in both Type LD1 and LD2 systems and accordingly the Fire Authority suggests that the reduction in escape provision allowed by BS9991 is not in the Irish context compensated for by any improved extent of automatic fire detection. The Fire Authority see this as an "unacceptable lowering of standards" in a sector of the building industry that they have highlighted as being found to be deficient in fire safety standards in a number of instances.

The Fire Authority hold the view that the appropriate design solution to permit omission of the secondary (upper level) exit is a combination of a protected stairway, Type LD1 automatic fire detection and an automatic sprinkler system (Category 2) to BS 9251:2014.

The appellant rejects this requirement and re-iterates his view that compliance with Section 9.5.2(c) of BS9991:2015 should be taken as delivering *de facto* compliance with Part B1 as a direct consequence of Section 1.2.2 of Technical Guidance Document B and the direct lineage from BS 5588:Part 1:1990 to BS991:2015.

4. CONSIDERATION

The appeal may be considered as presented and no new issues arise as would demand a *de novo* consideration.

The Fire Authority take the view that the change in guidance between the original Clause 10.4(b)(2) of BS 5588:Part 1:1990 and its successor Clause 9.5.2(c) of BS 9991 with regard to omitting the second exit from the flat is subject of the compensatory effect of the inclusion of Type LD1 automatic fire detection as opposed to Type LD2, which in effect represents an increased requirement to provide automatic fire detection in all rooms. In Ireland, the different approach between IS3218 and BS 5839:Part 6 means that the new inclusion of reference to Type LD1 detection does not deliver any improvement between the two design approaches. The Fire Authority see this as an "unacceptable lowering of standards". In fact, the enhanced level of detection associated with Type LD2 in Ireland could also be taken to mean that the original BS 5588:Part 1 compliant designs were in fact being "over-engineered" in Ireland relative to their UK counterparts. In any event what is now clear is that the requirements of Clause 9.5.2(c) of BS 9991:2015 would be equally met by inclusion of a Type LD1 system to either BS5839:Part 6 or IS3218. Whatever disparities may have existed between UK and Irish practice prior to 2015 (as a result of different product standards in the specification of fire detection and alarm system), there is no basis for retention of such disparities going forward.

The Fire Authority have not argued that application of BS9991:2015 is not a valid means of demonstrating compliance with Part B1 to the Building Regulations in Ireland. What they seem to be arguing is that the changes introduced between BS5588:Part 1 and BS9991 do not take any account for the Irish situation and therefore do not (in the Irish context) deliver their intended effect in terms of compensation for a reduced standard. This argument is entirely predicated on the subjective concept of trade-off, where omission of one fire precaution is required to be compensated for by inclusion of an alternative one. Another and more objective design approach might be that a given suite of fire precautions in combination is determined as delivering the necessary level of safety and once all the necessary precautions are present then adequate safety is achieved. Clause 9.5.2(c) of BS9991 makes it objectively clear that a combination of a protected stairway and Type LD1 detection will permit a duplex flat to comply with Part B1. The appellant is proposing to include such a combination of measures in this case and this should be the end of the matter. The fact that prior to publication of BS9991 such an approach would not have been acceptable is neither here nor there, as similar arguments could be made regarding the Fire Authority's own design solution, i.e. additional automatic fire suppression. Rather than representing the design proposals as "lowering the standard of fire safety to an unacceptable

degree", it could equally be argued that the pre-2015 Irish designs including both a *de facto* Type LD1 fire detection system and a second exit were an unintended consequence of lack of co-ordination between those drafting British and Irish Standards. In simple terms, if BS5588:Part 1 had required Type LD1 as a pre-requisite to allowing a duplex flat with exits at both levels then it would have made same explicit in Clause 10.4. The publication of IS3218 in 2013 represented a significant departure in terms of fire detection standards from its 1987 predecessor and, by association, BS5588:Part 1 compliant designs for duplex flats between 1990 and 2013. It is noted that Technical Guidance Document B published in 2006 refers to Type LD2 systems in terms of BS5839:Part 6, i.e. within the circulation route and high risk spaces only not including bedrooms. In such a context, it could be argued that the publication of IS3218 in 2013 introduced a higher set of standards for fire detection in dwellings than included for in Technical Guidance Document B.

The Fire Authority has imposed a design solution that in their view is sufficient to permit omission of the secondary (upper level) exit. Their design solution comprises a combination of a protected stairway, Type LD1 automatic fire detection and an automatic water fire suppression system complying with Table 2 of BS 9991:2015. There is no explicit basis in BS 9991 for this locally determined bespoke solution given that it is in excess of the code's own recommended package of fire precautions for the subject duplex scenario. It is noted that the inclusion of automatic fire suppression to permit inner room bedrooms in Clause 9.7 of BS 9991 is restricted to single level flats with certain characteristics. Equally, the imposition by the Fire Authority of Condition No. 2 requiring installation of a Category 2 automatic sprinkler system (to BS 9251:2014) infers from Table 2 of BS9991 that the Fire Authority sees the scenario to hand as being akin to increased travel distance in cluster, e.g. shared student, flats. All other Category 2 solutions relate to building factors external to the flat. It is not in keeping with the closely aligned UK and Irish practices in fire safety design, for a duplex flat scenario, that is specifically addressed in Clause 9.5.2(c) of BS9991, to be sufficiently different in Ireland as to require its design in such a significantly different manner. Moreso, the difference in approach between jurisdictions has only arisen post the publication of IS3217 in 2013 and without the benefit of publication of a revision of Technical Guidance Document B in the interim as might help to clarify issues such as these.

On balance it is concluded that the design solution imposed by the Fire Authority is not sufficiently well founded on published fire safety guidance nor is it proportionate to the problem as perceived by the Fire Authority as to require setting aside of the authoritative guidance of BS 9991 in this matter. It is entirely reasonable for BS 9991:2015 to be used as a basis for demonstrating compliance with Building Regulation B1 on the same basis that BS 5588:Part 1:1990 was used heretofore.

5. CONCLUSION

It is recommended that this appeal be upheld.

The subject Condition No. 2 attached to the Fire Safety Certificate as granted by Dublin City Council (under Reference FSC1320/17) on 22nd February 2017 should be removed.

The remaining 2 no. Conditions (Conditions No.'s 1 and 3) attached to the granted Fire Safety Certificate are not subject of this appeal and should remain.

The granted Fire Safety Certificate should therefore remain subject of 2 no. Conditions.

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