



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

**Report 3167**

**An Bord Pleanála Appeal**  
**regarding the attachment of Conditions by Dun Laoghaire-Rathdown**  
**County Council to grant of Fire Safety Certificate for proposed two**  
**storey apartment at Block C, Abbey Road, Monkstown, Co. Dublin.**

Client: An Bord Pleanála,  
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FAO: The Secretary

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**BUILDING CONTROL ACT, 1990 – APPEAL**

**FIRE SAFETY CERTIFICATE APPLICATION FOR PROPOSED 3 STOREY RESIDENTIAL BUILDING COMPRISING A SINGLE APARTMENT UNIT (No.23) LOCATED AT GROUND FLOOR AND A TWO STOREY APARTMENT UNIT (No.24) LOCATED AT THE FIRST AND SECOND FLOOR ACCESSED DIRECTLY FROM THE OUTSIDE AT BLOCK C, ABBEY ROAD, MONKSTOWN, CO. DUBLIN**

**APPEAL AGAINST THE ATTACHMENT OF CONDITIONS NO. 1 AND 2 TO FIRE SAFETY CERTIFICATE (REF. FSC/DR/191/17/7DAY) ON 22<sup>nd</sup> MARCH 2017**

**AN BORD PLEANÁLA APPEAL REFERENCE 06D.FS0559**

Local Authority: Dun Laoghaire Rathdown County Council

Appellant: Lensfield Limited

**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 Conditions No. 1 and No. 2 attached to the Fire Safety Certificate as granted by Dun Laoghaire Rathdown County Council (under Reference FSC/DR/191/17/7DAY) on 22<sup>nd</sup> March 2017 should be removed.

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

The granted Fire Safety Certificate should therefore remain subject of 1 no. Condition.

**Dr. Raymond J Connolly**

BE, PhD, CEng, MIEI, MIFireE, MSFPE

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**1. RELEVANT INFORMATION**

- i. Application for Fire Safety Certificate by Lensfield Ltd. to Dun Laoghaire-Rathdown County Council dated 24<sup>th</sup> January 2017 – subsequently updated on 31<sup>st</sup> January 2017.
- ii. Compliance Report AI/3662/R2/Issue 1 (dated 26<sup>th</sup> January 2017) by Jeremy Gardner Associates and associated drawings.
- iii. Fire Safety Certificate (17/8020/7DAY) granted by Dun Laoghaire-Rathdown County Council issued on 22<sup>nd</sup> March 2017 (subject of 3 no. Conditions).
- iv. Letter of appeal from Jeremy Gardner Associates on behalf of Lensfield Ltd. to An Bord Pleanála dated 13<sup>th</sup> April 2017.
- v. Letter sent by Dun Laoghaire-Rathdown County Council to An Bord Pleanála dated 9<sup>th</sup> May 2017 outlining observations/comments by Fire Officer.
- vi. Letter from Jeremy Gardner Associates on behalf of Lensfield Ltd. to An Bord Pleanála dated 12<sup>th</sup> June 2017 responding to Fire Officer comments.

## **2. BACKGROUND**

Jeremy Gardner Associates on behalf of Lensfield Ltd made an application to Dun Laoghaire Rathdown County Council for a Fire Safety Certificate for a proposed 3 storey residential building comprising a single apartment unit (no.23) located at ground floor and a two storey apartment unit (no.24) located overhead on the first and second floor accessed directly from the outside at Block C, Abbey Road, Monkstown, Co. Dublin.

The Fire Safety Certificate was granted by Dun Laoghaire Rathdown County Council (under Reference FSC/DR/191/17/7DAY) on 22<sup>nd</sup> March 2017 subject to 3 no. Conditions including *inter-alia*:-

### Condition No. 1

*The maisonette shall have:*

- (a) *An alternative exit from any habitable room that is not on the entrance level of the maisonette (See Figure 2 BS 9991:2015), or*
- (b) *A protected stairway enclosure serving all habitable rooms and an alternative exit from every floor level other than the entrance level (see Figure 3, BS 9991:2015),or*
- (c) *A protected stairway enclosure and an LD1 Grade B fire detection and alarm system in accordance with IS 3218:2013, if no floor is more than 7.5 metres above or below the level of the entrance of the maisonette; and*
- (d) *an AAWFSS (see 11.2, Table 2, BS 9991:2015).*

### Reason:

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

AND

### Condition No. 2

*In the flat/apartment and maisonette areas, the furniture and furnishings shall comply with and meet the requirements of "Fire safety of furniture and furnishings in the home" as published by the Furniture Industry Research Association as far as is reasonably practicable.*

### Reason:

*To comply with the provisions of Part B2 of the Second Schedule to the Building Regulations, 1997 to 2014.*

On 13<sup>th</sup> April 2017, Jeremy Gardner Associates on behalf of Lensfield Ltd appealed to An Bord Pleanála against the attachment of these Conditions (Conditions No.'s 1 and 2) to the Fire Safety Certificate. The residual Condition (Condition No. 3) is not subject of the current appeal.

### 3. REPRISE OF APPEAL (AS PRESENTED)

#### Condition No. 1

*The maisonette shall have:*

- (a) *An alternative exit from any habitable room that is not on the entrance level of the maisonette (See Figure 2 BS 9991:2015), or*
- (b) *A protected stairway enclosure serving all habitable rooms and an alternative exit from every floor level other than the entrance level (see Figure 3, BS 9991:2015), or*
- (c) *A protected stairway enclosure and an LD1 Grade B fire detection and alarm system in accordance with IS 3218:2013, if no floor is more than 7.5 metres above or below the level of the entrance of the maisonette; and*
- (d) *an AWFSS (see 11.2, Table 2, BS 9991:2015).*

#### Reason:

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

The subject works comprise a proposed three storey residential building with the maisonette subject to Condition No. 1 sitting at first and second floor levels and accessed directly from ground floor by a single stairway. The second floor of the maisonette is 5.7 metres above ground level, i.e. more than 4.5 metres but less than 7.5 metres above external ground level.

BS 9991 *Fire safety in the design, management and use of residential buildings – Code of Practice*, British Standards Institution, 2015 recommends fire precautions relevant to the subject arrangement in Clause 9.5.2 as follows:-

- (a) *An alternative exit from any habitable room that is not on the entrance level of the maisonette (See Figure 2);*  
*or*
- (b) *A protected stairway enclosure serving all habitable rooms and an alternative exit from every floor level other than the entrance level (see Figure 3);*  
*or*
- (c) *A protected stairway enclosure and an LD1 fire detection and alarm system in accordance with BS 5839:Part 6:2013, if no floor is more than 7.5 metres above or below the level of the entrance of the maisonette;*  
*or*
- (d) *A protected stairway enclosure and an AWFSS (see 11.2, Table 2).*

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 9991:2015. Accordingly, 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.

The appellant contends that Clause 9.5.2 of BS 9991 offers a choice of four no. options (a), (b), (c) or (d) whereas the Condition attached to the Fire Safety Certificate offers only three options (a), (b) and the combination of (c) and (d).

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 (Table 2 of BS 9991:2015) to BS 9251:2014.

The appellant subsequently confirms his opinion that BS 9991:2015 follows directly from BS 5588:Part 1:1990 and therefore should be a suitable basis for demonstration of compliance. The appellant points out that there are significant differences between a Type LD1 and Type LD2 fire detection and alarm system in IS 3218:2013, albeit these differences do not manifest themselves



in this particular case. The appellant suggests that this should not undermine the principle that inclusion of a Type LD1 system provides sufficient compensation for omission of the second exit route.

The appellant points out that the subject works are subject of the Building Control Management System and there should be no expectation of poor construction standards. Also, the Fire Safety Certificate concerns itself with proper design of the building with issues of sub-standard construction practices being irrelevant in such a context.

The appellant concludes his view that compliance with the most up-to-date guidance, i.e. Section 9.5.2(c) of BS9991:2015 is a suitable basis for demonstrating compliance with Part B1.

**Condition No. 2**

*In the flat/apartment and maisonette areas, the furniture and furnishings shall comply with and meet the requirements of "Fire safety of furniture and furnishings in the home" as published by the Furniture Industry Research Association as far as is reasonably practicable.*

**Reason:**

*To comply with the provisions of Part B2 of the Second Schedule to the Building Regulations, 1997 to 2014.*

The appellant suggests that Condition No. 2 is a unreasonable request in the context of the internal contents of private dwellings. The appellant points out that BS 9991:2015 does not provide any requirements for furniture and fittings within apartments or maisonettes. The appellant confirms that controls on furniture and fittings are not included in Technical Guidance Document B for residential buildings and accordingly it is unreasonable to attach a Condition seeking to control the contents of dwellings.

The Fire Authority draws on Clause 2.0.3 of Technical Guidance Document B as the basis for attaching Condition No. 2. The Fire Authority is of the view that "Technical Guidance Document B is dated" so have offered reference in Condition No. 2 to a more recent Furniture Industry Research Association (UK) guidance document. The Fire Authority point out that they are not explicitly requiring compliance with the guidance document but rather are strongly suggesting compliance where possible.

The appellant suggests that given the Local Authority are not requiring compliance with the subject guidance document then it is unnecessary to make it a Condition attached to the Fire Safety Certificate. Furthermore, the appellant suggests that it is unrealistic to control any furniture or fitting within an individual's private residence and the Condition is impracticable.

#### **4. CONSIDERATION**

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

##### ***Condition No. 1 (Requirement to install automatic fire suppression)***

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 upper level of the maisonette 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 - which is indeed appropriate given that they reference the standard in Condition No.1. What the Authority 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 typically 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.

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. Moreover, the difference in approach between jurisdictions has only arisen post the publication of IS 3217 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.

***Condition No. 2(Requirement to follow Furniture Industry Research Association guidance)***

Building Regulation B2 states:-

*"For the purposes of inhibiting the spread of fire within a building, the internal linings -*

- (a) shall have either a rate of heat release or rate of fire growth and resistance to ignition which is reasonable in the circumstances*
- (b) shall offer adequate resistance to the spread of flame over their surfaces"*

There is no reference in Building Regulation B2 to the internal contents, furniture, furnishing or fittings within a building. Specifically in Clause 2.0.3 of Technical Guidance Document B states that it is impractical to attempt to control furniture and fittings through Building Regulations. This indeed reflects the reality of the situation and the limits on the authority granted to the public service in the enforcement of the Building Control Regulations. Generally, wider societal safety levels are sought to be imposed through controls on the manufacture, sale and labelling of these products both nationally and through European CE marking frameworks etc.

In attaching Condition No. 2, the Local Authority *ultra vires* has acted beyond its authority in these matters.

## **5. CONCLUSION**

It is recommended that this appeal be upheld.

The subject Condition No. 1 attached to the Fire Safety Certificate as granted by Dun Laoghaire Rathdown County Council (under Reference FSC/DR/191/17/7DAY) on 22<sup>nd</sup> March 2017 should be removed.

The subject Condition No. 2 attached to the Fire Safety Certificate as granted by Dun Laoghaire Rathdown County Council (under Reference FSC/DR/191/17/7DAY) on 22<sup>nd</sup> March 2017 should be removed.

The remaining Condition (Condition No. 3) attached to the granted Fire Safety Certificate is 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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