

**Report for An Bord Pleanála**

**on**

**Appeal against Condition 2 on Fire Safety Certificate FSC/293/2022**

**for**

**Construction of a new Duplex over Duplex Residential Building**

**at**

**Ballymastone, Donabate, Fingal**

|                       |                  |
|-----------------------|------------------|
| Client:               | An Bord Pleanála |
| An Bord Pleanála Ref: | 314643-22        |
| Our Ref:              | ABP_R022_Issue 1 |

## 1.0 Introduction

This report sets out my findings and recommendations on the appeal submitted by MSA, acting on behalf of Cairn Homes Properties Ltd., against Condition 2 on Fire Safety Certificate FSC/293/2022 by Fingal County Council in respect of an application for works related to Proposed Construction of a new Duplex over Duplex Residential Building at Ballymastone, Donabate, Fingal.

It is noted that having regard to the nature of the Conditions under appeal, it is considered that the appeal can be adjudicated upon without consideration of the entire of the application.

## 1.1 Subject of Appeal

Condition 2 of the granted Fire Safety Certificate (FSC/293/2022) by Fingal County Council is as follows: -

**Condition 2:**

*The maisonettes entered from Second Floor level shall be provided with either:*

- a) An alternative exit from any habitable room that is not on the entrance level of the maisonette; or*
- b) A protected stairway enclosure serving all habitable rooms and one alternative exit from every floor level other than the entrance level; or*
- c) A protected stairway enclosure and an LD1 fire detection and fire alarm system in accordance with IS3218: 2013 +A1 2019, and an AWFSS conforming to BS9251: 2021 or IS EN 12845.*

**Reason:**

*To comply with Part B1 of the Second Schedule to the Building Regulations 1997 to 2021.*

## **2.0 Documentation Reviewed**

- 2.1 Fire Safety Certificate Application (application form, compliance report and fire safety drawings) submitted by MSA, on behalf of Cairn Homes Properties Ltd., on 15<sup>th</sup> September 2021.
- 2.2 BCMS log of request for revised information dated 15/10/2021. It is noted copy of email not provided.
- 2.3 Additional Information from MSA to Dublin Fire Brigade dated 08/12/2021.
- 2.4 Granted Fire Safety Certificate FSC/293/2022 from Fingal County Council dated 15/08/2022.
- 2.5 Letter of Appeal from MSA, acting on behalf of Cairn Homes Properties Ltd., received by An Bord Pleanála on 14/09/2022.
- 2.6 Fire Officer's report on Fire Safety Certificate Appeal dated 05/10/2022 to An Bord Pleanála.

### 3.0 Building Control Authority's Case

In response to the appeal of Condition 2 Dublin Fire Brigade offer the following rebuttal: -

- Technical Guidance Document B (Reprinted Edition 2020) Section 1.1.2 refers the reader to Section 3 of BS 5588: Part 1 for recommendations in relation to the internal planning of, and escape routes from, maisonettes.
- BS 5588 Part 1 Section 3, Clause 10.4 has the following recommendations for maisonettes with one or more storeys situated more than 4.5m above ground or access level and entered from above or below. It is noted that Clause 1 of BS 5588: Part 1 differentiates between maisonettes provided with their own entrance situated at ground or access level and those entered through any common stair or shared internal circulation space.

The following recommendations are applicable.

- a) No maisonette should be so planned that any habitable room is an inner room.
  - b) On every storey situated more than 4.5 m above ground level (other than the floor of entrance to the maisonette) either:
    - 1) an alternative exit from each room should be provided (see Figure 9 and Figure 11); or
    - 2) at least one alternative exit should be provided, and all habitable rooms should be entered directly from either a protected entrance hall or a protected landing (see Figure 10).
- While the British Standard does not necessarily require the provision of a fire detection and alarm system, Technical Guidance Document B Section 1.5.5.2 recommends a minimum of a Grade D Category LD2 fire detection and alarm system in this type of dwelling.
  - Thus the subject maisonettes, having a storey situated more than 4.5m above ground level, should comply with the measures outlined above to demonstrate prima facie compliance with Part B of the Second Schedule of the Building Regulations.
  - It is noted that Technical Guidance Document B (Reprinted Edition 2020) does not refer to BS 9991 as a suitable means of demonstrating prima facie compliance for the subject dwelling type.
  - The proposed design offers FD30S fire doors to the protected stairway instead of FD20 fire doors and additional coverage of the fire detection and alarm system to include bedrooms (in addition to the required escape routes and high risk rooms i.e. kitchen and living space) in lieu of an alternative exit at the upper level. These are not deemed adequate compensatory features.
  - In conclusion, it is the opinion of Dublin Fire Brigade that due to the lack of an alternative exit on the upper floor of the upper Duplex units, it is appropriate to apply a condition to provide alternative exits as per a code compliant design, or a AWFSS conforming to BS9251: 2021 or IS EN 12845 in lieu of alternative exits.

## 4.0 Appellant's Case

In their appeal letter the appellant makes the following case: -

- Guidance provided in Technical Guidance Document B (TGD-B) on how to achieve compliance with the functional requirements of B1-B5 of the Building Regulations. It is noted that the approach within TGD-B provides one method of achieving compliance and that it should also be noted that Section 0.2 of TGD-B permits alternative approaches to be used.
- Section 1.1.2 of TGD-B refers to BS 5588: Part 1: 1990 which has been withdrawn and replaced with BS 9991, the current version of which is BS 9991: 2015. It is therefore considered appropriate to use the guidance contained within BS 9991: 2015 to demonstrate compliance with the functional requirements of B1-B5 of the Building Regulations.
- Furthermore, the Department of Environment and Local Government have endorsed the use of BS9991 as the basis for achieving compliance with the functional requirements of Part B of the Building Regulations.
- Section 9.5.2 of BS 9991: 2015 states that maisonettes having a floor that is situated higher than 4.5m above Ground or Entrance Level should have **ONE** of the following: -

### 9.5.2 Maisonettes having a floor level higher than 4.5 m above ground or access level

Maisonettes that have a floor level that is situated higher than 4.5 m above the ground level or the access level should have at least one of the following:

- 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 one 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 fire alarm system in accordance with BS 5839-6:2013, if no floor is more than 7.5 m 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).
- The proposed upper duplex units have a floor level that is more than 4.5m (approx. 6m) and have been designed in accordance with Section 9.5.2 (c). We note that the 'level of entrance' to the maisonette is at Second Floor level (and not a ground floor level), therefore there is no floor level within these duplexes that are in excess of 7.5m above the 'level of entrance'. The maisonettes in question are accessed by a common protected stairway enclosed in 60 minute fire resisting construction with FD30S doorsets. The protected stair is also provided with an AOV.
  - Based on the above it is proposed that the upper duplex units are designed and will be constructed in accordance with Section 9.5.2 c) of BS 9991 as highlighted above which we note is in full compliance with the above referred Section of BS 9991.

- Each duplex unit will be provided with the following: -
  - The internal protected stairway is to be enclosed with 30 minute fire rated partitions and FD30 doorsets with self-closing devices.
  - A self-contained Grade D LD1 Fire Detection and Alarm system in accordance with IS 3218: 2013 +A1: 2019 is to be provided throughout the duplexes which will alert occupants throughout of any potential fire and allow early escape.
  - Each of the duplexes shall be fully enclosed with 60 minutes fire rated construction and FD30S doorsets and are considered separate compartments and separated from the protected stairway and other duplex.
- As set out above, it is clear that Condition 2 is demanding compliance with both Section 9.5.2 (c) and (d) of BS 9991: 2015 which is in excess of the minimum recommended by BS 9991: 2015.

## 4.0 Consideration

The appellant is of the view that BS 5588 Part 1 is an old and withdrawn standard and have used BS 9991 as their design basis. Dublin Fire Brigade do not accept this approach with respect to maisonettes and want an approach based on the recommendations of TGD-B.

Department of Housing, Planning and Local Government, Circular Letter BC02-2020 dated 2<sup>nd</sup> March 2020 – Additional Guidance to Technical Guidance Document B Fire Safety 2006 states:

*‘Section 0.1.4 of TGD B indicates that the detailed provisions set out in the document are intended to provide guidance for some of the more common building situations. In other situation, alternative ways of achieving compliance with the requirements of the Regulations may be appropriate. The use of alternative design solutions, standards, systems or methods of fire protection to those outlined in the Document are acceptable, provided the level of fire safety achieved is adequate to satisfy the requirements of the Regulations.*

*Queries have been raised as to the role of BS 9991 in demonstrating compliance with Part B of the Building Regulations. In this regard, in the case of buildings containing flats, BS 9991 is not considered as a means to prima facie indicate compliance with Part B of the Second Schedule to the Building Regulations. ‘*

BS 9991: 2015 is not referred to as a basis for prima facie compliance with Part B of the Second Schedule to the Building Regulations primarily base on its ‘stay put’ policy. However, the approach outlined in Section 9.5.2 point c) of BS 9991: 2015 does not imply the use of stay pit policy.

The approach often adopted by Dublin Fire Brigade is that the applicant either uses the TGD-B (with reference to BS 5588 Part 1) approach or alternatively uses an approach based on BS9991 in its entirety (i.e. no cherry picking). In this instance the applicant chose to follow the BS 9991: 2015 in its entirety and this is in accordance with Section 0.2 of TGD-B and circular BC02-2020 that permits alternative approaches to be used.

It is noted that although Dublin Fire Brigade have stated that they are looking for compliance with TGD-B in their Condition they have accepted a solution that would include sprinkler protection to the duplexes: -

*d) A protected stairway enclosure and an LD1 fire detection and fire alarm system in accordance with IS3218: 2013 +A1 2019, and an AWFSS conforming to BS9251: 2021 or IS EN 12845.*

It is noted that this is a combination of the recommendations from clause c) and d) of BS 9991: 2015. The obvious difference being that they are looking for compliance with clause c) and d) whereas BS 9991: 2015 would look for compliance with either c) or d). Dublin Fire Brigade have not explained why this would be considered an acceptable approach or given the basis for allowing this alternative option.

- Section 9.5.2 of BS 9991: 2015 states the following: -

#### **9.5.2 Maisonettes having a floor level higher than 4.5 m above ground or access level**

Maisonettes that have a floor level that is situated higher than 4.5 m above the ground level or the access level should have at least one of the following:

- 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 one 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 fire alarm system in accordance with BS 5839-6:2013, if no floor is more than 7.5 m 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).

The appellant's design is in accordance with clause c) of section 9.5.2 of BS 9991: 2015.

## **5.0 Conclusions**

Given that the basis of design for the proposed duplex building is BS 9991: 2015 and that this is an acceptable alternative approach as per Section 0.2 of TGD-B 2006 (AMD 2020) the use of Section 9.5.2 of BS 9991: 2015 for the design of the maisonettes is a reasonable design approach.

Therefore, as the Appellant has demonstrated that the proposed means of escape from the duplexes are in compliance with Clause c) of Section 9.5.2 of BS 9991: 2015 it is my opinion that Appellant is correct, and that Condition 2 should be removed from the granted Fire Safety Certificate

## **6.0 Recommendation**

On the basis of my findings and conclusions I recommend that An Bord Pleanála grant the appeal and instruct that Condition 2 is removed from the Fire Safety Certificate.

**Signed by:**

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**Des Fortune**

MSc(Fire Eng), BSc(Eng), CEng MIEI, MIFireE

**Date:** **27<sup>th</sup> January 2023**