



An
Bord
Pleanála

FSC Report

ABP-320329-24

**Appeal v Refusal or Appeal v
Condition(s)**

Appeal to a condition to a Granted
Fire Safety Certificate

Development Description

Construction of 68 Units residential
building in 5 levels over ground floor
car park and ancillary accommodation.

**Building Control Authority Fire Safety
Certificate application number:**

SN 3017379
FSC 240111DC/7DN

Appellant

Mr. David Leydon

Appellant's Agent

Ryan and Associates

Building Control Authority:

Dublin City Council

Inspector

Eamon O Boyle

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1.0 Introduction

- 1.1. The Fire Safety Certificate, which is the subject of this appeal, was lodged with the Building Control Authority (BCA) on the 15th of February 2024. The application concerned the construction of 68 residential units in five levels over a lower ground floor car park and ancillary accommodation at Blackhorse Industrial Estate, Blackhorse Ave, Dublin 7.
- 1.2. The application, which was a seven-day notice application, refers to the construction of a new building with ancillary accommodation over a lower ground floor car park.
- 1.3. This application is appealing a condition to a granted fire safety certificate.
- 1.4. Condition 2 of the granted fire safety certificate is being appealed. Details of Condition 2 are as follows:

Condition 2:

The car park is to be provided with a sprinkler system compliant with IS EN 12845 2015 + A: 2019

2.0 Information Considered

The information considered in this appeal comprised the following:

- Letter of appeal from the appellants' s agent dated 26th July 2024
- Copy of Fire Safety Certificate Compliance Report (Rev A) complete with drawings dated 31 Jan 2024
- Copy of additional information submitted to the BCA (RFI 1) on the 16th June 2024
- Copy of Granted Fire Safety Certificate (FSC 2401111DC/7DN) dated 25th July 2024
- Submissions received from the BCA on the appeal on dated 29th August 2024

3.0 Relevant History/Cases

- 3.1. I am not aware of any Fire Safety Certificate history with this site.
- 3.2. An Bord Pleanála have considered a similar appeal (ABP 316063-23) which considers sprinklers in underground car parks. The Bord has also considered a similar appeal which was reported on by this Inspector.

4.0 Appellant's Case

- 4.1. The appellant is appealing Condition 2 of the granted fire safety certificate largely on the basis that sprinklers in basement car parks are not necessary to demonstrate compliance with Part B of the Building Regulations. The following points are set out in support of the appeal:

- **Regulation B1**

The appellant confirms that the residential units are in compliance with the requirements of sections 1.6 and 1.7 of Technical Guidance Document B 2006 (2020). The building will be provided with domestic sprinklers in accordance with BS 9251:2021. The appellant states

that there is no reference in TGD B for sprinkler protection to basements for means of escape purposes under sections 1.2, 1.3, 1.6, 1.7, or 1.8. The appellant also states that sprinkler protection is being provided in the residential units to facilitate the open-plan nature of the units. The appellant states that the risk of fire in the basement is the same whether the units are open-plan or not.

- **Regulation B2**

The appellant states that all linings in the basement will comply with Regulation B2 of the building regulations; therefore, the provision of sprinklers is not a requirement.

- **Regulation B3**

The appellant states that there is no requirement for sprinklers to be provided in car parks under Regulation B3 of the building regulations, and this is clearly stated in section 3.5.2.2 of TGD B. The appellant quotes as follows:

The appellant also makes the following points:

- The car park is separated from all parts of the buildings with non-combustible compartment construction.
- All stairs are separated from the car park with double lobby approach where they connect with the accommodation overhead.
- There is additional escape providing direct access to the outside.
- The car park will be provided with natural ventilation as set out in section 3.5 of Technical Guidance Document B.

- **Regulation B4**

The appellant states that Regulation B4, which addresses external fire spread, is not relevant to the appeal as there is no likelihood of fire spread to neighbouring buildings. Hence, the provision of sprinklers is not a requirement of Regulation B4.

- **Regulation B5**

The appellant draws attention to paragraph 5.4.3.1 of TGD B, which indicates that sprinkler protection is not required in basement car parks. The appellant quotes from TGD B as follows:

The appellant also states that the basement car park will comply with the requirements of section B5 of TGD B; therefore, the provision of sprinklers is not a requirement. The appellant further sets out the requirements for sprinkler installations in buildings and lists the occasions when sprinklers are required.

- **BS 9251:2021**

The appellant also includes a note in respect of the above British Standard. The appellant states that the code is not referred to in TGD B 2006 (reprint 2020) and is therefore not relevant. The standard is a code of practice providing a guideline and should not be used as a specification document. The appellant further states that the requirements of the standard are for residential buildings with more than four stories or greater than 18 m in height. The appellant confirms that the height of the top floor of the building, which is the subject of this appeal, is 13 m, which is below the 18 m requirement. The appellant confirms that the standard was updated in June 2021. They further state that the foreword indicates that guidance on the application of sprinkler systems is given in Approved Document B (ADB).

The appellant notes that table four of the ADB (dwellings and buildings other than dwellings), updated in 2020, does not require sprinkler protection in corridors, stairs, or common areas where they are sterile. The appellant also references section 16.1.11: Car parks are not normally expected to be fitted with sprinklers (see section 11 of Approved Document B, Volume 2).

- **EV Chargers**

The appellant notes Dublin Fire Brigade's concern in respect of electric vehicles charging during a fire incident. The appellant is of the opinion that sprinklers in a basement, in the event of a fire with EV chargers, would create a more dangerous environment for untrained persons, including residents, and could prove fatal from electrocution because of the interaction of water and electricity.

- **Conclusion**

The appellant concludes that sprinkler installation in basement car parks is not a requirement of TGD B or ADB to satisfy the requirements of Part B of the building regulations. The appellant also asserts that where sprinklers are provided as a compensatory measure, it is not a requirement to comply with all sections of BS 9251:2021.

5.0 Building Control Authority Case

- 5.1. The BCA set out their case by reference to research and assert that TGD B is not up to date with research and does not take cognisance of the risk posed to firefighters. The BCA also note a specific emerging risk associated with electrical vehicles.

The BCA responded to ABP, and their response was received on 29th August 2024, with a report titled "Fire Officer's Supplementary Report on Fire Safety Certificate dated the 9th August 2024."

The BCA sets out its observations in respect of Conditions 8 and 10. As these conditions are not being appealed, it is not proposed to address the issues raised therein. This report will only address matters relevant to Condition 2.

- **Technical Guidance Document B**

The Building Control Authority concludes that it is supportive of environmental policies and recognises the need to adopt evolving technologies in relation to alternative fuels and transportation methods. It further states that international and national guidance has not kept pace with the extensive use of plastics in vehicles over the past 30 years, including plastic fuel tanks, which have significantly changed how cars behave during a fire. Modern vehicle design cannot be subject to the same lag in guidance revisions as seen with changes in fire load within buildings, such as in the subject case. That is, car design is advancing more rapidly than updates to TGD B. Where such guidance lags behind, it may be said that buildings can be considered prohibitively dangerous for both their occupants and attending firefighters.

The BCA suggests that, as battery technology continues to evolve, consideration must be given to how future technology may behave in fire situations and the impact they may have on the built environment.

The BCA calls for more research into car park fires, with a view to improving guidance on the requirements for sprinklers in car parks within Technical Guidance Document B.

- **Basement Car Park Risk**

The BCA believes that a basement car park should not be deemed low risk with a low fire load. It argues that existing guidance does not adequately consider the fire load associated with modern vehicles, electric vehicles, hydrogen vehicles, and the risks of running fuel fires from plastic fuel tanks. Furthermore, the BCA states that the outdated understanding of fire loads in modern vehicles—reflected in TGD B—leads to the assumption that car parks are not normally expected to be fitted with sprinklers. The BCA contends that a form of fire suppression, such as sprinklers, is vital for controlling fire development, allowing safe means of escape for occupants (including persons with disabilities), and enabling fire crews to safely access the basement for firefighting.

- **Electric Vehicles and Fire**

The BCA also notes that electric vehicle fires are likely to become more commonplace. Such incidents in underground car parks will expose residents and firefighters to additional hazards. The installation of a sprinkler system in underground car parks appears to be the only viable solution to prevent fire spread to other vehicles. It is the view of the BCA that a multi-electric-vehicle car fire will represent a significant challenge in the future.

- **Summary**

The BCA are of the view that TGD B does not take cognisance of car fire research. The occurrence of fire in a basement car park poses a significant risk to fire fighters which will be compounded by the presence of electric vehicles.

6.0 **Assessment**

6.1. Details lodged with the appeal

The information lodged by both the appellant and the BCA are in my view adequate for ABP to decide on the appeal.

6.2. ***De Novo* assessment/appeal v conditions**

Having regard to the nature of the appeal which is solely against a condition, and having considered the submissions on the file and having regard to the provisions of Article 40 of the Building Control Regulations 1997, as amended, I am satisfied that the determination by the Board of this application as if it had been made to it in the first instance would not be warranted. Accordingly, I consider that it would be appropriate to use the provisions of Article 40(2) of the Building Control Regulations, 1997, as amended’.

6.3. **Content of Assessment**

In making the assessment it is necessary to establish the degree of compliance with technical guidance document B. Having reviewed the plans and particulars lodged with the appeal as well as

the commentary of the BCA I am of the view that the particulars provided are adequate to enable ABP to establish compliance with Part B of the second schedule of the building regulations. Having considered the case made by the appellant and the commentary of the BCA I consider that the BCA were not correct in attaching condition 2 to the granted fire safety certificate. My consideration is based upon the following:

- The fact that the basement design complies with the requirements of TGD B
- The BCA have produced no specific noncompliance with the appellants fire safety certificate application and have largely confined their submission to the inadequacies of TGD B in addressing basement car parks.

In the case of condition 2 having considered the case made by the appellants and the commentary of the BCA I consider that the BCA should have considered the application within the provisions of TGD B only.

7.0 Recommendation

- 7.1. I conclude that the building control authority should be directed to remove condition 2 from the granted fire safety certificate.

8.0 Reasons and Considerations

Having regard to the presented design of the residential development and the compliance report, to the submissions made in connection with the Fire Safety Certificate application and the appeal, and to the report and recommendation of the reporting inspector, it is considered that it has been demonstrated by the appellant in the fire safety application and appeal that the basement car park does not require sprinkler protection to meet the requirements of Part B of Technical Guidance Document B - Fire Safety 2006 (reprinted 2020) [TGD: Part B] . Therefore, Condition number 2 as originally attached by the Building Control Authority to the fire safety certificate is not necessary to meet the guidance set out in TGD: Part B or accordingly to demonstrate compliance with Part B of the Second Schedule to the Building Regulations 1997, as amended. The Board was satisfied that, subject to the attachment of the remaining conditions (excluding Condition 2) as removed by the Board, it has been demonstrated that the development, if constructed in accordance with the design presented with the application and appeal, would comply with the requirements of Part B of the second schedule to the Building Regulations 1997, as amended.

9.0 Sign off

I confirm that this report represents my professional assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

EAMON O BOYLE

12 May 2025