

# **FSC Report**

ABP-319919 - 24

Appeal v Refusal or Appeal v Appeal to two conditions attached to a

**Condition(s)** granted Fire Safety Certificate

**Development Description** Proposed construction of a 15-storey

office and commercial development

above a Basement Car park.

**Building Control Authority Fire Safety** FSC 1224/24/7D

Certificate application number: (SN3008376/FSC2204278DC/7DN)

**Appellant** Mr. Mark Polychronakis

**Agent** Mr. Paul Keogh, Director, Jensen

Hughes

Building Control Authority: Dublin City Council

**Inspector** Eamon O Boyle

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#### 1.0 Introduction

- 1.1.The development comprises 15 story office above a basement car park a cafe on the ground floor adjacent to the reception lobby and a winter garden for use by office occupants on the upper floors. The development is located at 2 Grand Canal Quay Dublin.
- 1.2. The application refers to new works, i.e., a new building.
- 1.3. The fire safety certificate application was a 7 Day Notice Fire Safety Certificate Application. This appeal is made in respect of two conditions that were attached to the granted Fire Safety Certificate (condition 4 and condition 17)
- 1.4. The Conditions being appealed are reproduced below (please note TGD B refers to Technical Guidance Document B)

**Condition 4:** Hydrants are to be provided in accordance with the requirements of Diagram 46 of TGD-B 2006 (Reprint 2020).

Reason: To comply with Part B of the Second Schedule to the Building Regulations, 1997 to 2022

**Condition 17:** All service risers containing electrical services shall be fire stopped both horizontally and vertically.

Reason: To comply with Part B of the Second Schedule to the Building Regulations, 1997 to 2022

#### 2.0 Information Considered

The information considered in this appeal comprised the following:

- Drawings and report submitted with the application on 9th August 2022
- Further information and Drawings received from the applicant by the Building Control Authority (BCA) on the following dates, 15th March 2023, 5th October 2023, 20th February 2024 and 8th May 2024
- Copy of BCA decision
- Appeal received by An Bord Pleanala (ABP) on behalf of the appellant on the
  7th June 2024.

- Drawings received by the Board with the appeal on 7th Jun 2024
- Submissions received from the BCA on the appeal on 9th July 2024
- Further submissions received from the appellant on 2nd August 2024.

### 3.0 Relevant History/Cases

- 3.1.I am not aware of any relevant building control history to this appeal site.
- 3.2. I am not aware of any decisions made by ABP at other locations that are relevant to this appeal

# 4.0 Appellant's Case

The appellant is appealing the attachment of Conditions 4 and 17 to the grant of the fire safety certificate largely on the basis that the fire strategy relies on the provisions of BS 9999:2017.

In the case of Condition 4 the appellant makes the following case:

- There is no Diagram 46 in TGD-B 2006 (Reprint 2020)
- The design complies with BS 9999:2017, Section 22.2 which is reproduced in Appendix A to this report
- Hydrants are provided based on one hydrant per 1000m2 largest floor area
  which requires a minimum of two hydrants that are provided
- References to use of TGD B only referred to occupant load which provided a more conservative solution i.e. increased the design occupation.

In the case of Condition 17 the appellant make the following case

- The building is designed in accordance with BS 9999:2017
- Due to the height of the building and the Risk Profile the elements of structure and compartmentation is required to achieve 120 minutes fire resistance.
- In accordance with Table 28 of BS 9999:2017 (Table 28 is reproduced in Appendix B to this report) there is no limit to compartment size however compartments elements must achieve the stated fire resistance (for compartments)
- o Walls or floors used to separate places of special fire risk which are ancillary

- to the building.
- Walls and floors which are provided to separate the different purpose groups in the building or different tenancies from each other.
- Floors to compartmentalise the building for external fire spread purposes.
- All floors will be compartment floors.
- The requirements of Section 31.4.6.2 (reproduced in Appendix C) are complied with for service risers accommodating electrical and mechanical services
- Risers are to be enclosed in 120-minute fire resistant construction vertically and accessed by 60-minute doors with smoke seals.
- Risers have been designed in accordance with Section 32.5.15 as protected service shafts. The guidance outlined in Section 32.5.15 (Reproduced in Appendix D) has been followed. The risers have the same fire resistance as the compartment wall or compartment floor through which it is passing (in this case 120 minutes).
- The appellant corresponded with the BCA on the 31<sup>st</sup> May 2024 (post grant of Fire Safety Certificate) to determine exactly which risers fell within the scope of Condition 17 – based upon an assessment of the implications of complying with the condition it was decided to lodge this appeal.

# 5.0 **Building Control Authority Case**

- 5.1. The BCA response to Condition 4 was as follows:
  - The BCA agree with the appellant that there is no Diagram 46 in TGD-B 2006 (Reprint 2020)- it was a typographical error which was communicated to the Appellant's Agent on the 6thJune 2024.
  - While the appellant states that the design is no relevance in accordance with BS 9999:2017 there are references to TGD B in particular occupant load factors
  - The BCA recommends that that ABP amend Condition 4
- 5.2. The BCA Response to Condition 17 was as follows:
  - Correspondence (email) from the Appellant to the BCA dated 31st May 2024 confirmed that that it is proposed to firestop a number of service risers both vertically and horizontally – hence they are unclear as to the reason for appealing Condition 17.

#### 6.0 Assessment

#### 6.1. Consideration

I have considered the cases submitted by the Appellant and the BCA. In respect of Condition 4 the appellant confirms that their design follows BS 9999:2017, the BCA have confirmed that the reference to Diagram 46 was a typographical error. In respect of Condition 17 the Appellant confirms that they comply with the relevant sections of BS 9999:2017, this is not disputed by the BCA. The BCA's view is that the appellant was disposed to providing horizontal firestopping in correspondence furnished after the Fire Safety Certificate was granted.

#### 7.0 Recommendation

#### 7.1. Condition 4

I recommend that the BCA be directed to remove Condition 4 from the Granted Fire Safety Certificate.

#### **7.2. Condition 17**

I recommend that the BCA be directed to remove Condition 17 from the Granted Fire Safety Certificate.

#### 8.0 Reasons and Considerations

- 8.1. **Condition 4:** Having considered the submissions of the appellant and the BCA I considered that both parties agree that Diagram 46 is in error and has no relevance to the granted Fire Safety Certificate.
- 8.2. Condition 17: Having considered the submissions of both the Appellant and the BCA I consider that the design of the service risers set out in the various submissions of the Appellant to the BCA complies with the requirements of BS 9999:2017 hence the condition has no relevance

# 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.

The inspector shall be signed and dated and the following line should be included at the end of the report to reflect the independence of the inspector's assessment.

EAMON O BOYLE

**INSPECTOR** 

7<sup>th</sup> March 2025

#### Appendix A (Section 22.2 of BS 9999:2017)

#### 22.2 Location and access to external water supply

All premises should be provided with a supply of water for <u>fire-fighting</u>. Fire-fighters <u>have to</u> lay out <u>hose</u> between the water supply and the fire appliance, so these distances should be kept to a minimum.

Hydrants should <u>be located in</u> positions that are near to building entry points (including entry points to fire-fighting shafts containing fire mains) and fire appliance parking positions, as follows.

- For buildings provided with dry fire mains, hydrants should be provided within 90 m of dry fire main inlets on a route suitable for laying hose.
- b) For buildings not provided with fire mains (or where the building is fitted with a wet fire main), hydrants should be provided within 90 m of an entry point to the building and not more than 90 m apart.

Water mains and hydrants should be capable of delivering a sufficient flow of water to enable effective <u>fire-fighting</u> to be undertaken. If the water supply takes the form of a static tank or dam, the capacity should be related to the size of the building and the risk involved.

NOTE An unlimited and guaranteed natural water source providing the right quantities is also expected to be acceptable, subject to access and <u>hard-standing</u> for fire appliances being provided.

Early consultation (prior to the construction of the building) should be undertaken with the water authority, fire and rescue service and building control body on the nature of the water supply and the quantities or capacity to be provided.

The water supply should comprise one or a combination of the following:

- 1) hydrants provided by the water supply company on the street mains;
- private hydrants designed and installed in accordance with BS 9990, ideally forming part of a ring main <u>system</u>;
- 3) a static or natural water supply.

All hydrants should have signage in accordance with BS 3251.

# Appendix B (Table 28 BS 9999:2017)

Table 28 Maximum dimensions of compartments

Risk profile	Single storey	Multi storey	
	Maximum floor area	Height of top floor	Maximum area of any floor
	m <sup>2</sup>	m	m²
A1	No limit	No limit	No limit
A2	No limit	<30	No limit
		≥30	4 000
A3	No limit	<18	14 000
		18 to 30	4 000
		≥30	Not acceptable
A4 A)	Not applicable A)	Not applicable A)	Not applicable A)
B1	No limit	No limit	No limit
B2	No limit	<18	8 000
		No limit	4 000
B3	2 000	<30	2 000
		≥30	Not acceptable
B4 <sup>A)</sup>	Not applicable A)	Not applicable A)	Not applicable A)
C1	No limit	No limit	No limit
C2	No limit	No limit	No limit
C3 B)	No limit	Not acceptable	Not acceptable
C4 A)	Not applicable A)	Not applicable A)	Not applicable A)

A) These categories are outside the scope of the standard (see Table 4).

<sup>8)</sup> Risk profile C3 is unacceptable under many circumstances unless special precautions are taken (see Table 4).

### Appendix C (Section 31.4.6.2 of BS 9999:2017)

#### 31.4.6.2 Protected shafts

#### 31.4.6.2.1 General

Spaces that connect compartments, such as stairways and service shafts, should be protected to restrict fire and smoke spread between the compartments.

Any walls or floors bounding a protected shaft should be treated as compartment walls or floors.

Any external wall to a protected shaft does not need to be a compartment wall, but fire resistance should be provided where necessary (see 31.4.6.2.2).

NOTE A section of roof over a protected shaft does not need to be a compartment floor.