



An
Bord
Pleanála

FSC Report

ABP 313248-22

Appeal v Refusal or Appeal v Condition(s)	Appeal to Condition attached to a Granted Revised Fire Safety Certificate
Development Description	Revised Fire Safety Certificate for Cherrywood Town Centre TC2 Development
An Bord Pleanála appeal ref number:	3131248 – 22
Building Control Authority Fire Safety Certificate application number:	FSC/053/2022
Appellant & Agent:	CWTC Multi Family ICAV (appellant) Michael Slattery and Associates (agent)
Building Control Authority:	Dun Laoghaire-Rathdown County Council
Date of Site Inspection	Not Applicable
Inspector/ Board Consultant:	Eamon O Boyle, Eamon O Boyle, and Associates
Appendices	Not Applicable.

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2.0 Introduction

- 2.1. A Revised Fire Safety Certificate application was received by the Building Control Authority (Dun Laoghaire – Rathdown County Council) on the 26th November 2019. The application sought to demonstrate compliance with Part B of the Second Schedule of the Building Regulations (S.I. 497: 1997).
- 2.2. The application is concerned reconfiguration of residential floor levels to facilitate increased number of apartments and material alterations to ancillary commercial/residential amenity areas. The installation of a green wall was also included in the application. The building is in Cherrywood Town Centre TC2 Development, Cherrywood.
- 2.3. The appeal relates to one condition (Condition 4) attached to the grant of the Fire Safety Certificate by the Building Control Authority (BCA). The reason stated for conditions 4 was to ensure compliance with Part B of *the Second Schedule of the Building Regulations 1997 – 2019*”.

3.0 Information Considered

- 3.1. In considering the application I have referred to the following information.

No.	Date	Description
1	26 th Nov 2019	Revised Fire Safety Certificate Application submitted to the Building Control Authority and ancillary communications
2	5 Apr 2022	The Appeal notification submitted by the appellants
3	27 Apr 2022	Fire Officer’s Report on Fire Safety Certificate Appeal

The following drawings were also furnished for consideration:

Drawing Title	Number	Revision
Blocks C1, C2. Basement Level Mezzanine	CWTC2-HJL-C-BM-A-FC1003	K
Blocks C1, C2 Level 00	CWTC2-HJL-C-BM-A-FC1004	J

Internal Elevations Courtyard 1/2	CWTC2-HJL-C1-ZZ- DR-A- 2003	H
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4.0 **Relevant History/Cases**

4.1. I am not aware of any previous appeals that have been submitted in respect of similar issues have arisen.

5.0 **Appellant's Case**

6.0 The appellants grounds for appeal to Condition 4 of the Granted Revised Fire Safety Certificate (FSC/053/2022) states that the compliance with the functional requirements of B1 to B5 of the building regulations have been demonstrated within the Fire Safety Certificate application through the application of Technical Guidance Document B (TGD B) and BS999: 2017 along with supporting guidance documents where relevant such as “Fire Performance of Green Roofs and Walls” Guidance Document issued by the Department of Communities and Local Government (UK) 2013. The development consists of two residential blocks, (Block C1 and C2) which are situated over a shared basement level. An irrigation greenwall system is proposed to a small section (circa 5m by 24m) of block C1 Courtyard

elevation on level 00 to the rear of the commercial units along gridline C4 to C7.

The proposed green wall system will be designed in line with the recommendations outlined with “Fire Performance Roofs and Walls” by the Department of Communities and Local Government UK 2013 in that;

- The extent of the green wall system will be limited to a single floor level will not reach compartment floors and will not connect to the residential floor levels
- The proposed green wall system achieves a performance rating of Euroclass B-S2, d0 or National Class 0 as outlined in Appendix C
- The external fire spread assessment outlined in section 5.2 of the fire safety compliance report demonstrates that the available boundary distance to the opposing apartments is sufficient to limit the likelihood of fire spread in the unlikely event of the green wall the section was to be regarded as on fire. The required boundary distance is shown to be 11.5 meters at 100% unprotected area while

the actual boundary distance to the opposing apartments opposite is 25 meters

The appellant further concludes that the green wall system is deemed to meet the functional requirements of B1 to B5 of the Second Schedule of the Building Regulations through the following

- The provision of the greenwall system does not impact on the number of escape routes with escape routes or travel distances within the development
- The provision of the green wall system does not impact on the internal building linings or fire safety classification
- The provision of the green wall system does not impact on the fire rated elements of structure within the development or the performance criteria of same
- Green wall system meets the recommendations of fire performance recommendations of “Green Roofs and Walls by the Department of Communities and Local Government (UK)2013
- The extent of the green wall system will be limited to a single floor and will not reach compartment floors and will not connect to the residential floor levels new paragraph The green wall system shall be provided with irrigation therefore reducing the likelihood of the system becoming dried out new paragraph The proposed greenwall

system is in order to achieve a performance rating of Euroclass B-S2, d0 or National Class 0

- An external fire spread to assessment has been undertaken on the extent of the green wall system to demonstrate, if the green wall system was to become involved the firepower that's sufficient space separation is provided to the opposing residential apartments such as the fire spread to said apartments is unlikely.
- Additionally, it is submitted that the condition 4 which involves prohibiting the use of greenwall systems is contrary to the current industry and local government ethos of having sustainability to the forefront of building design

7.0 Building Control Authority Case

7.1. The BCA responded to ABP , their response was received on 27th April 2022 with their file on the application.

7.2. The (BCA) sets out its observations that the content of Condition 4 -is necessary. The BCA states that since the Grenfell disaster, a greater awareness exists of the risks associated with rapid fire spread on external facades of buildings. Dublin Fire Brigade are of the opinion that green wall systems if not properly maintained, could lead to high rates of flame spread and heat release over the building surface. The risk of ignition from an external source is also greater. BCA further quotes from technical guidance document B as follow:

The requirements of B4 may be met:

- (a) if the external walls are constructed so that the risk of ignition from an external source, and the spread of fire over their surfaces, is restricted by making provision for them to have low rates of spread of flame, and in some cases low rates of heat release,*
- (b) if the amount of unprotected area in the side of the building is restricted so as to*

limit the amount of thermal radiation that can pass through the wall, taking the distance between the wall and the boundary into account, and

(c) if the roof is constructed so that the risk of spread of flame and/or fire penetration from an external fire source is restricted,

in each case so as to limit the risk of a fire spreading from the building to a building beyond the boundary, or vice versa.

The extent to which this is necessary is dependent on the use of the building, its distance from the boundary and (in some cases) its height.

The BCA states that the makeup of the proprietary frame systems may be in accordance with the requirements of Table 4.1 of TG DB, their concern relates to the organic matter itself, contained within the system and its potential to pose high risk of fire spread should the irrigation system fail to function due to the lack of maintenance and the plants and organic growing medium becomes dry. Organic medium when dry is extremely flammable and can pose problems for fire crews during firefighting operations.

The BCA further states that the absence of adequate and sustained maintenance of systems in buildings is an ongoing issue and is encountered on a regular basis. This is true of active and passive systems where national standards, building codes and guidance exist.

The BCA further states that no national standards or guidance have been published by the Irish government in relation to green walls. Irish standards for other active systems such as fire detection and alarm system and emergency lighting systems place statutory responsibilities on those designing, installing, testing and commissioning and maintaining such systems throughout their lifespan. The BCA further states that the proposed greenwall system which will be designed in accordance with

“Fire Performance of Green Walls” published by the Department of Communities and Local Government in the UK. This document has no legal standing in Ireland. Dublin Fire Brigade do not reference this document in relation to green roofs in the absence of domestic guidance, but we have specific concerns in relation to greenwall systems and their potential to constitute a fire risk to buildings in the event that they dry out.

It should be noted that the BCA addresses the other Conditions in their submission, but these conditions are not being appealed and are not being considered.

8.0 Assessment

8.1. Details lodged with application

8.1.1. We have examined the drawings, reports and submissions submitted and consider that the information is sufficient to enable ABP to make a determination in respect of this appeal.

8.2. Content of Assessment

8.2.1. In making the assessment it is necessary to only examine the degree of compliance with the Building Regulations B4 as there is no implication for any other Building Regulation (i.e. Regulations B2,B3, B4 or B5) from what has been granted by the BCA. The basis of our assessment is confined to the provisions of Technical Guidance Document B 2006, BS 9999:2017.

8.2.2. Having reviewed the plans and particulars lodged with the appeal as well as the commentary of the BCA, we are of the view that the particulars provided are adequate to enable the ABP to establish compliance with Part B of the Building Regulations.

8.2.3. 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 4 to the granted Fire Safety Certificate. Our consideration is based upon the following:

- The fact that the greenwall system complies with Table 4.1 of Technical Guidance Document B
- The fact that the space separation is twice what is required by Technical Guidance Document B

- The BCA have produced no factual evidence that the systems would not be maintained. The BCA should not have assumed that the system would not be maintained
- The application of “Fire Performance of Green Walls” published by the Department of Communities and Local Government in the UK is an appropriate code to assess the fire performance of green walls.

In the case of Condition 4 having considered the case made by the appellants and the commentary of the BCA I consider that the BCA should have considered the information submitted and not make assumptions in respect of ongoing maintenance.

9.0 Conclusion / Recommendation

9.1. My overall conclusion in this appeal is the Condition No. 4 should be removed.

10.0 Reasons and Considerations

Having regard to the form and nature of the condition, the submission lodged with the Fire Safety Certificate Application and the Appeal, the reports from the BCA and the Appellant and to the report and recommendations of the reporting inspector and in particular the issues raised by the BCA, the Board is satisfied that it has been fully demonstrated that the condition should be removed.

Eamon O Boyle

Chartered/Engineer
Consultant/Inspector
17 Jun 2023