

Report to An Bord Pleanála

on

Appeal against Condition No 3

Fire Safety Certificate (Reg Ref No. FA/17/1498)

by

Dublin City Council

for

Construction of Student Accommodation Block

at

25-29 Dominick Street Upper, Dublin 7

CLIENT	:	AN BORD PLEANALA
AN BORD PLEANALA REF NO	:	ABP-300849-18
BCA REG REF No.	:	FA/17/1498
OUR REF.	:	18121_ABP.300849.18_R01
DATE	:	14 May 2018

1.0 Introduction

1.1 Subject Matter of Appeal

This report sets out my findings and recommendations on the appeal submitted by Jeremy Gardner Associates [hereafter referenced as JGA] on behalf of their Client, Ziggurat Dominick Street Ireland Limited – Ziggurat Student Fund IV, against Conditions No 3 attached to the Fire Safety Certificate (BCA Reg. Reference No. FA/17/1498) granted by Dublin County Council [hereafter referenced as DCC] in respect of a new Student Accommodation Block at 25-29 Dominick Street Upper, Dublin 7

The condition under appeal states the following:

Condition 3

Vehicle access for high-reach vehicles is to be provided to 50% of the perimeter of the building and is to comply with Section 5.2.4 (Design of Access Routes and Hardstanding), Table 5.2 (including a turning area in the courtyard) and Diagram 32 of Technical Guidance Document B

With the stated reason for the condition being:

Reason:

To comply with Section B5 of the Second Schedule to the Building Regulations 1997-2017.

Having reviewed the documents on the appeal file I am satisfied that the determination by the Board of this application as if it had been made the Board in the first instance would not be warranted. Accordingly I consider that it would be appropriate to use the provisions on Article 40(2) of the Building Control Regulations 1997-2015 in this instance.

1.2 Documents Reviewed

- 1.2.1 Fire Safety Certificate Application and Supporting Documentation submitted by JGA on behalf of their Client
- 1.2.2 Appeal submission to An Bord Pleanala by JGA dated 01.02.2018.
- 1.2.3 Appeal submission to An Bord Pleanala by DCC dated 06.03.2018.

2.0 Condition 3 – Arguments by Appellant and BCA

Condition 3

Vehicle access for high-reach vehicles is to be provided to 50% of the perimeter of the building and is to comply with Section 5.2.4 (Design of Access Routes and Hardstanding), Table 5.2 (including a turning area in the courtyard) and Diagram 32 of Technical Guidance Document B

Case made by DCC

DCC refer to Section 5.2 of Technical Guidance Document B in support of the imposition of the condition under appeal.

They note that Technical Guidance Document B in Table 5.1 prescribes that perimeter access should be provided taking account of the height and volume of the building in question.

In this instance the overall volume of the building is estimated to be circa 9,000m³ – and thus falling into the 7,000 - 28,000m³ band in Table 5.1 of TGDB- and the height of the top floor exceeds 10m.

On that basis DCC correctly identify that Table 5.1 of TGDB prescribes that there be 50% perimeter access suitable for High Reach appliances.

Case made by JGA

JGA state that the site is such that it is not possible to achieve High Reach appliance access to 50% of the elevations having regard to the plan area of the courtyard. They note that the space required to enable a High Reach appliance to turn exceeds the plan dimensions of the courtyard and therefore compliance with Condition 3 would necessitate a total re-design of the scheme.

JGA go on to note that they have proposed the fitting of dry rising mains in both blocks with dry riser landing valves at each floor level as an alternative strategy for fire-fighting i.e. whereby the fire service can tackle a fire from inside the building using the dry rising main system. They note that they have also proposed water tender access into the courtyard for a distance of 20m being the “limit” in TGD-B for dead-ends on fire service access routes.

It is noted that the JGA proposals - as set out in their FSC submission and Compliance Report - are based on BS9991:2015 as an alternative to the provisions in Section 5 of TGD-B 2006.

BS9991:2015 does not require any specific percentage of perimeter access to apartment blocks – including student housing – but rather seeks to restrict the distance which the fire service have

to lay hoses to 45m. This is achieved by either laying hoses directly from the fire appliance parking position up the stairs and then to the most remote part of the floor plate or by provision of dry risers in which case the 45m is measured from the dry riser landing valves.

BS9991:2015 also prescribes that the dry riser inlet be located within 18m of the fire vehicle standing position and that the landing valves should be located in the staircases which should in turn be treated as fire-fighting shafts enclosed with 120 minute rated walls and FD60S rated doorsets.

JGA note that the use of dry rising mains has been accepted on various other projects in lieu of fire vehicle perimeter access.

3.0 Considerations.

It is considered that the strategy in BS9991 for apartment buildings, including student housing, is more rational/logical than the “perimeter access” approach in TGDB having regard to the level of internal compartmentation in apartment buildings. It is anomalous for instance to provide 50% perimeter access to an apartment block which, while of value to those apartments which front onto the accessible perimeter, is of little/no value to apartments which do not front onto that section of building perimeter. It is noted that the UK Approved Document B: 2013 is also consistent with BS9991:2015 in advocating this particular approach for apartment blocks.

Accordingly it is considered that the strategy proposed by JGA, which is based on the recommendations of BS9991:2015, is an appropriate approach for this type of development. However in adopting a compliance strategy based on BS9991:2015 it is considered essential that all relevant aspects of BS9991 are incorporated in those proposals including inter alia:

- Requirement that the dry rising landing valves be located with the protected staircases per Figure 35 of BS9991. It is noted that this provision of the code is at odds with Condition 4 of the Grant of Certificate
- Requirement that the fire rating of the staircase enclosure be 120 minutes with FD60S rated doorsets i.e. to act as a fire-fighting bridgehead,
- The configuration of the staircase enclosure to Core B at GFL should accord with Figure 34(a) of BS9991:2015 i.e. route protected by vented common lobbies,
- The access roadway into the site (i.e. area shown shaded on the JGA Ground Floor Plan drawing A1/3524/1/3A) should accord with Table 5.2 of TGD-B 2006 i.e. min 3.7m wide x min 3.7m clear height with gate not less than 3.1m wide. These dimensions do not appear to be fully complied with by reference to the JGA Elevation/plan drawings A1/3524/1/3A and 7.

4.0 Recommendations

Having considered the submissions made by the Appellant and BCA I consider that the BCA should be directed to remove Condition 4 and to amend Condition 3 to read as follows:

Condition 3

The staircase enclosures in Cores A and B shall be designed to conform to the recommendations in Clause 50 of BS9991 including an EI120 rating for the walls enclosing the staircase, FD60S rated self-closing doorsets between the common lobbies and the stairs, and the dry riser landing valves to be located within the staircase enclosure.

Access to the stairs at ground level of Core B shall accord with Figure 34(a) of BS9991, to include vented lobbies between the route to the stairs and the ground floor residences.

The fire tender access roadway, as indicated on the Basement and Ground Floor drawing No. A1/3524/1/3A shall conform to Table 5.2 of Technical Guidance Document B 2006 for Pump Appliances

Revised particulars demonstrating compliance with the foregoing shall be submitted to and agreed in writing with the Building Control Authority prior to commencement of the works.

Reason:

To comply with Section B5 of the Second Schedule to the Building Regulations 1997-2017.

MAURICE JOHNSON

Managing Director | Chartered Engineer | BE(Hons), CEng., MStructE, MIEI, MSFPE

Date : _____