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AN BORD PLEANÁLA	
LDG-	_____
ABP-	_____
20 JUN 2019 Doh	
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Time:	16:54 By: <u>Leand</u>

Report to An Bord Pleanála

on

Appeal against Condition No 3

Fire Safety Certificate (Reg Ref No. FS 12/18)

by

Galway City Council

for

Construction of Student Accommodation Building

at

Fairgreen Road, Galway

CLIENT	:	AN BORD PLEANALA
AN BORD PLEANALA REF NO	:	ABP-302555-18
BCA REG REF No.	:	FA/12/18
OUR REF.	:	18121_ABP.302555.18_R01
DATE	:	30 th January 2019

Directors:

Maurice Johnson
BE, CEng, MStructE, MIEI
MSFPE

Luke Fegan
BA, BAI, PDip FSP, MA, MSc(FireEng)
CEng, MIEI

Stefan Hyde
BA, BAI, PDip FSP, MA, CEng, MIEI

Maurice Johnson & Partners Ltd
Registered in Ireland
Company Reg No: IE 470005



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, Cairn Homes, against Condition No. 3 attached to the Fire Safety Certificate (BCA Reg. Reference No. FA 12/18) granted by Galway City Council [hereafter referenced as GCC] in respect of a new Student Accommodation Block at Fairgreen Road, Galway.

The condition under appeal states the following:

Condition 3

All student accommodation, common rooms, study rooms and staff areas shall be protected with an automatic fire suppression system in accordance with BS 9251 2014

With the stated reason for the condition being:

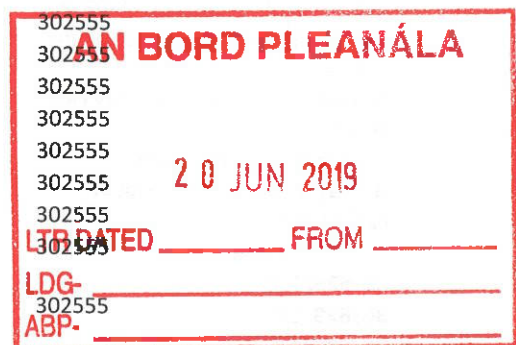
Reason:

To comply with Section B1 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

Drawing No:	Drawing Title:	Received by the PA:	ABP Stamped:	ABP Ref:
No drawing title or drawing no	Site Location Map	07.02.18 - FS12/17	28.09.18	302555
No drawing title or drawing no	Site Plan	07.02.18 - FS12/17	28.09.18	302555
BG/629/1/3	Ground Floor Plan	07.02.18 - FS12/18	28.09.18	302555
BG/629/1/4	Mezzanine Plan	07.02.18 - FS12/18	28.09.18	302555
BG/629/1/5	First Floor Plan	07.02.18 - FS12/18	28.09.18	302555
BG/629/1/6	Second - Fourth Floor Plan	07.02.18 - FS12/18	28.09.18	302555
Received by the				
Drawing No:	Drawing Title:	PA:	ABP Stamped:	ABP Ref:
No Drawing no visible on drawing	Ground Floor Plan	24.05.18 - FS12/18	28.09.18	302555
BG/629/1/4 Rev A	Mezzanine Plan	24.05.18	28.09.18	302555
BG/629/1/5 Rev A	First Floor Plan	24.05.18 - FS12/18	28.09.18	302555
BG/629/1/6 Rev A	Second - Fourth Floor Plan	24.05.18 - FS12/18	28.09.18	302555
BG/629/1/7 Rev A	Fifth Floor Plan	24.05.18 - FS12/18	28.09.18	302555
BG/629/1/8 Rev A	Sections	24.05.18	28.09.18	302555
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BG/629/1/3 Rev B	Ground Floor Plan	27.07.18 - FS12/18	28.09.18	302555
BG/629/1/4 Rev B	Mezzanine Plan	27.07.18 - FS12/18	28.09.18	302555
BG/629/1/5 Rev B	First Floor Plan	27.07.18 - FS12/18	28.09.18	302555
BG/629/1/6 Rev B	Second - Fourth Floor Plan	27.07.18 - FS12/18	28.09.18	302555
BG/629/1/7 Rev B	Fifth Floor Plan	27.07.18 - FS12/18	28.09.18	302555
	Internal Elevations	27.07.18 - FS12/18	28.09.18	302555
	External Elevations	27.07.18 - FS12/18	28.09.18	302555
Reference:	ABP Stamped:	ABP Ref:		
BG/629/gm/17abp	12.11.18	302555		
BG/629/rp/11gfs	26.10.18	302555		
Form 6	22.10.18	302555		
FS/12 ABP Letter	22.10.18	302555		
ABP- 302555-18 Letter	18.10.18	302555		
Email-Anna Howard	18.10.18	302555		
Article 31 of 1997 BC	22.10.18	302555		
Section 131 Form	02.10.18	302555		
Galway City Council	28.09.18	302555		
Galway City Council	27.09.18 - 6237	302555		
Fire Safety Certificate	15.08.18	302555		
Fire Safety Certificate - Recommendation	28.09.18	302555		
FSC App FS12/18 Extention of time letter	01.08.18	302555		
FSC App FS12/18 Extention of time letter	28.09.18	302555		
FSC App FS12/18 Extention of time letter	19.07.18	302555		
Fire Safety Cert Application 27.07.18 - FS12/18	28.09.18	302555		
FSC App FS12/18 Extention of time letter	28.09.18	302555		
FSC App FS12/18 Extention of time	31.07.18	302555		



letter				
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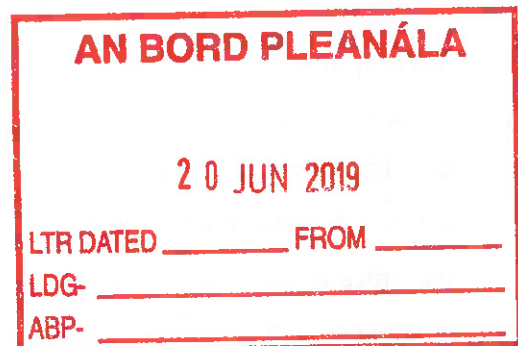
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BG/629/1/2	Site Plan	07.02.18 - FS12/18	26.11.18	302555
	Site Plan	07.02.18 - FS12/18	26.11.18	302555



2.0 Condition 3 – Arguments by Appellant and BCA

Condition 3

All student accommodation, common rooms, study rooms and staff areas shall be protected with an automatic fire suppression system in accordance with BS 9251 2014

Reason:

To comply with Section B1 of the Second Schedule to the Building Regulations 1997-2017.

Case made by GCC

The GCC response of 02.10.18 to the JGA appeal set out a number of reasons as follows:

- GCC consider sprinklers an important compensatory measure for the technical fire safety issues with escape stairwells, firefighting shaft and lack of fire brigade access
- All 3 stairs serving the building have technical fire safety issues with escape stairwells:
GCC considered Stairs 01 to be at risk of the wedging of fire doors in the open position due to cross circulation
Stairs 02 becomes a shared stair at 1st floor with the neighbouring Intreo building
Stair 03 is considered challenged because it is remote from the street and relies on a corridor through the building to deliver to street
- Vehicle access and fire fighter personnel entry into the building is considered challenging
- Sufficient number of firefighting shafts are not considered to have been provided

Case made by JGA

The JGA consideration (12.11.18 BG/629/gm/17abp) of the GCC response above addresses each issue raised:

Stair 01 – JGA advised that the cross circulation risk is mitigated by provision of access control whereby the stair doors are secured whereby general day to day circulation is not possible through the stair.

Stair 02 – JGA advise that the site has been the subject of a previously approved FSC (FS 178/06) where a 4 storey residential building was approved on the basis of the stair being shared with the office at each upper level. It is stated by JGA that the “*stairs in the student accommodation and adjacent office will be approached by way of a protected lobbies at all levels*”. JGA describe their interpretation that Clause 31 (b) BS 9991 2015 quoted by GCC relates to “*mixture of residential and non-residential occupancies are provided within a single building*” presumably they had intended to say A single stair building.

Stair 03 – JGA describe how this stair is accessed from the street by way of an imperforate fire rated corridor “with no access to this corridor... along its entire length of its route” thereby justifying that its depth does not compromise the protection afforded to it.

Fire brigade vehicle access – JGA cite that its common place for brownfield sites to have restricted perimeter access and that a host of national and international guidance relate the provision of dry rising mains internally with the relaxation of the requirement for perimeter access as proffered in their design. JGA also note the availability of access to the rear via the “Elms housing estate”.

Number of firefighting shafts – JGA responds to the GCC observation that the building only has one firefighting shaft despite the floor area being in excess of 900m² by demonstrating that the floor over 18m has a floor area of less than 900m² (c600m² at 5th) per the relevant prescriptive guidance.



3.0 Considerations.

GCC in the grant of FSC FS 12/18 with condition 03 cite the reasoning as follows:

“In order to comply with B1 of the Building Regulations 1997 and subsequent amendment (means of escape in case of fire)”

Regulation B1 “means of escape in case of fire” reads as follows: *“A building shall be so designed and constructed that there are adequate means of escape in case of fire from the building to a place of safety outside the building, capable of being safely and effectively used”.*

It is noted that matters such as firefighting shafts and perimeter access are addressed under **Regulation B5** of the Building Regulations *“Access and facilities for the fire service”*.

Accordingly given that B5 was not originally cited as the reason for the imposition of Condition 03 we do not propose herein to revisit the provisions for *“Access and facilities for the fire service”*.

Thus the consideration distils down to considering whether or not there is *“adequate means of escape in case of fire from the building to a place of safety outside the building, capable of being safely and effectively used”*.

The JGA response on the adequacy of stairs 1 & 3 address the concerns raised regarding their integrity.

However it is stated that in the JGA response that *“stairs in the student accommodation and adjacent office will be approached by way of a protected lobbies at all levels”*.

I observe that this is not consistent with the 1st floor plan where student residential Stair 02 meets the Intreo accommodation and there is single door protection between Intreo space and the route out of Stair 02 without any ventilation.

It is noted that standard BS 9991 which forms the basis of the validated and approved FSC does not impose an upper limit on floor height where a building is provided with a single stair. Accordingly a single stair student accommodation building is permissible once the allowable dead end distance and ventilation provisions are met for a building with a top floor height over 18m with a floor area less than 900m².

The proposed scheme is served by 3 escape stairs and there is no proposed dead ends within the communal areas and at first glance I would consider it to be afforded robust means of escape.

There are a numbers of strengths to the design from a B1 perspective that should be considered in the round:

- FD60S front doors to clusters whereby BS 9991 requires FD30S
- No proposed dead ends in communal areas
- Marginally over the 18m
- Availability of 3 stairs
- Availability of ventilated lobbies

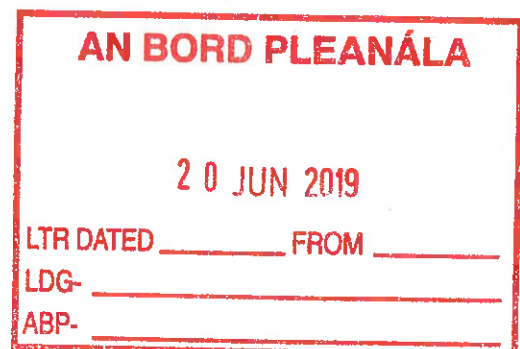
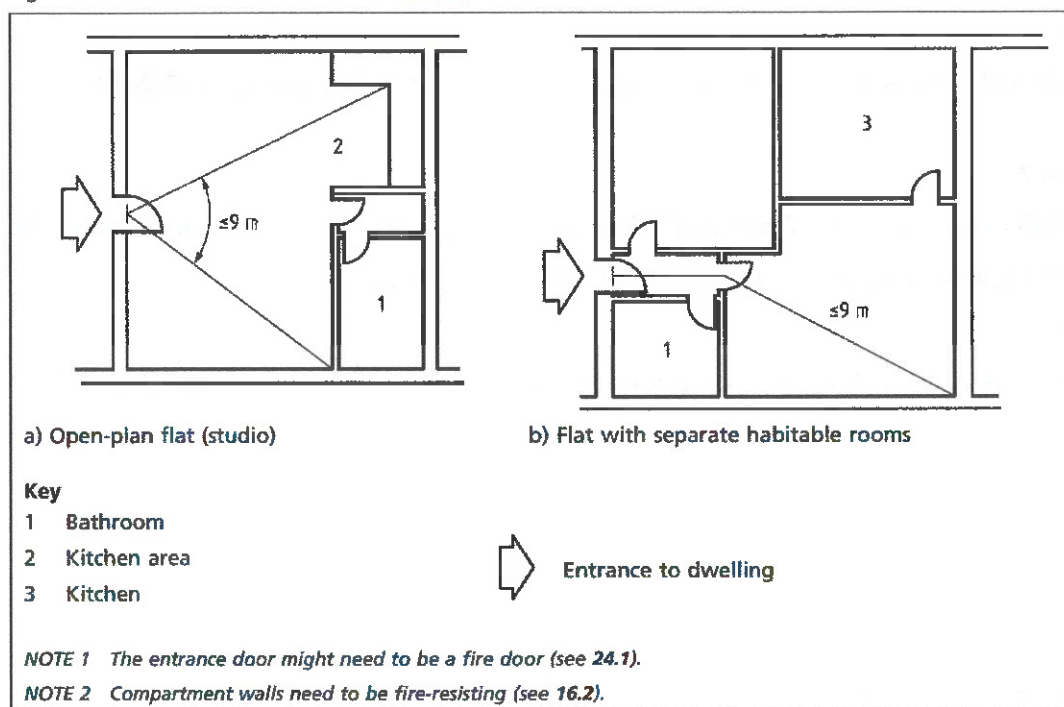
Sprinklers are a prescriptive requirement where the following measures are exceeded/not met:

- Building top floor height over 30m (Regulation B3)
- Dead end distance within the Cluster exceeds 9m (Regulation B1)
- Where the internal layout is open plan (Regulation B1)

The proposed top floor height is significantly less than 30m in and the travel distance within the cluster is less than 9m.

The “shared living” units are configured such that the bedrooms are an inner room off a shared living room/ kitchen and the kitchen hob is c800mm from the bedroom door and would not be considered to satisfy the provision of Figure 10 BS 9991 (extract below).

Figure 10 Flat with restricted travel distance



4.0 Recommendations

Having considered the submissions made by the Appellant and BCA I consider that the BCA should be directed to amend Condition 3 as follows and to add a new Condition 7 to read as follows:

Condition 3

~~All student accommodation, common rooms, study rooms and staff areas shall be protected with an automatic fire suppression system in accordance with BS 9251 2014~~

The shared living units where the bedrooms are an inner room off the kitchen/living room shall be provided with a Class 1 BS 9251 2014 sprinkler system and the hob shall not be within 1.5m of the escape route from the bedroom or the design amended to comply with Figure 10 BS 9991 2015.

Reason:

To comply with Section B1 of the Second Schedule to the Building Regulations 1997-2017.

Condition 7

The INTREO office accommodation at 1st floor shall be separated from the residential stair 02 route by way of a vented lobby or an independent stair shall be provided.

Reason:

To comply with Section B1 of the Second Schedule to the Building Regulations 1997-2017.

LUKE FEGAN

Director | Chartered Engineer

BA BAI MA MSc Fire Eng PDip FSP

Date: _____



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Appeal against Condition No 3

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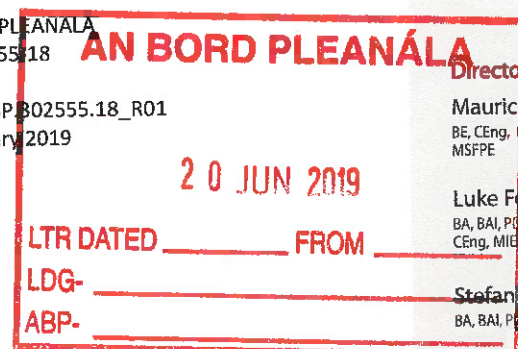
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at

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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, Cairn Homes, against Condition No. 3 attached to the Fire Safety Certificate (BCA Reg. Reference No. FA 12/18) granted by Galway City Council [hereafter referenced as GCC] in respect of a new Student Accommodation Block at Fairgreen Road, Galway.

The condition under appeal states the following:

Condition 3

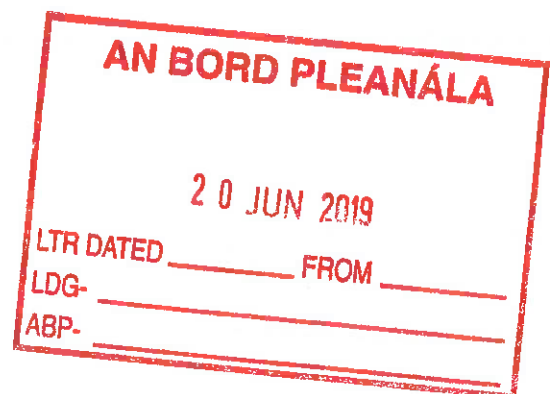
All student accommodation, common rooms, study rooms and staff areas shall be protected with an automatic fire suppression system in accordance with BS 9251 2014

With the stated reason for the condition being:

Reason:

To comply with Section B1 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.



letter				
FSC App FS12/18 Extension of time letter	19.07.18		302555	
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ABP Memo FSC 20.11.18				302555

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20 JUN 2019

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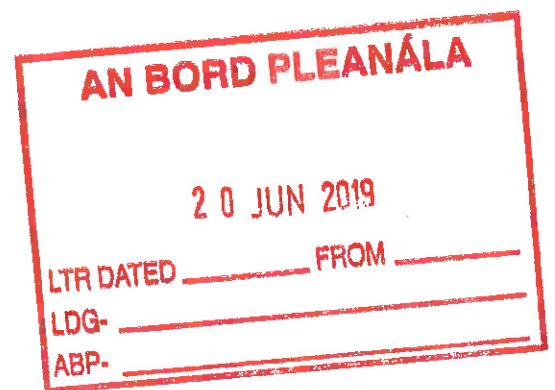
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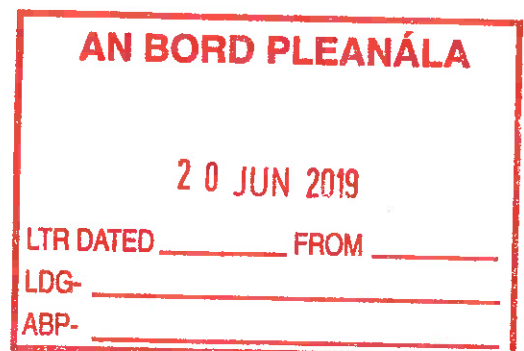
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It is noted that matters such as firefighting shafts and perimeter access are addressed under **Regulation B5** of the Building Regulations "Access and facilities for the fire service".

Accordingly given that B5 was not originally cited as the reason for the imposition of Condition 03 we do not propose herein to revisit the provisions for "Access and facilities for the fire service".

Thus the consideration distils down to considering whether or not there is "adequate means of escape in case of fire from the building to a place of safety outside the building, capable of being safely and effectively used".

The JGA response on the adequacy of stairs 1 & 3 address the concerns raised regarding their integrity.

However it is stated that in the JGA response that "stairs in the student accommodation and adjacent office will be approached by way of a protected lobbies at all levels".

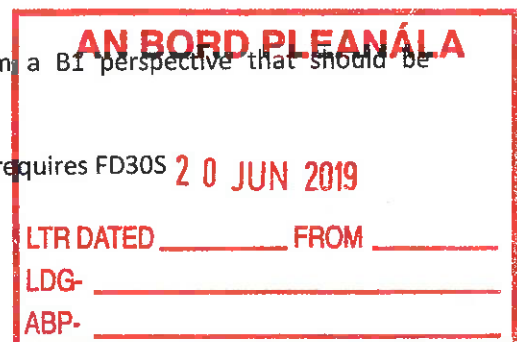
I observe that this is not consistent with the 1st floor plan where student residential Stair 02 meets the Intreo accommodation and there is single door protection between Intreo space and the route out of Stair 02 without any ventilation.

It is noted that standard BS 9991 which forms the basis of the validated and approved FSC does not impose an upper limit on floor height where a building is provided with a single stair. Accordingly a single stair student accommodation building is permissible once the allowable dead end distance and ventilation provisions are met for a building with a top floor height over 18m with a floor area less than 900m².

The proposed scheme is served by 3 escape stairs and there is no proposed dead ends within the communal areas and at first glance I would consider it to be afforded robust means of escape.

There are a numbers of strengths to the design from a B1 perspective that should be considered in the round:

- FD60S front doors to clusters whereby BS 9991 requires FD30S
- No proposed dead ends in communal areas
- Marginally over the 18m
- Availability of 3 stairs
- Availability of ventilated lobbies



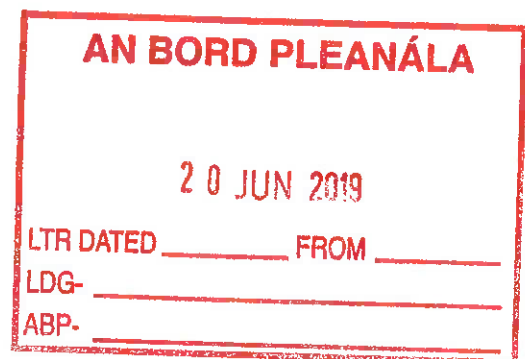
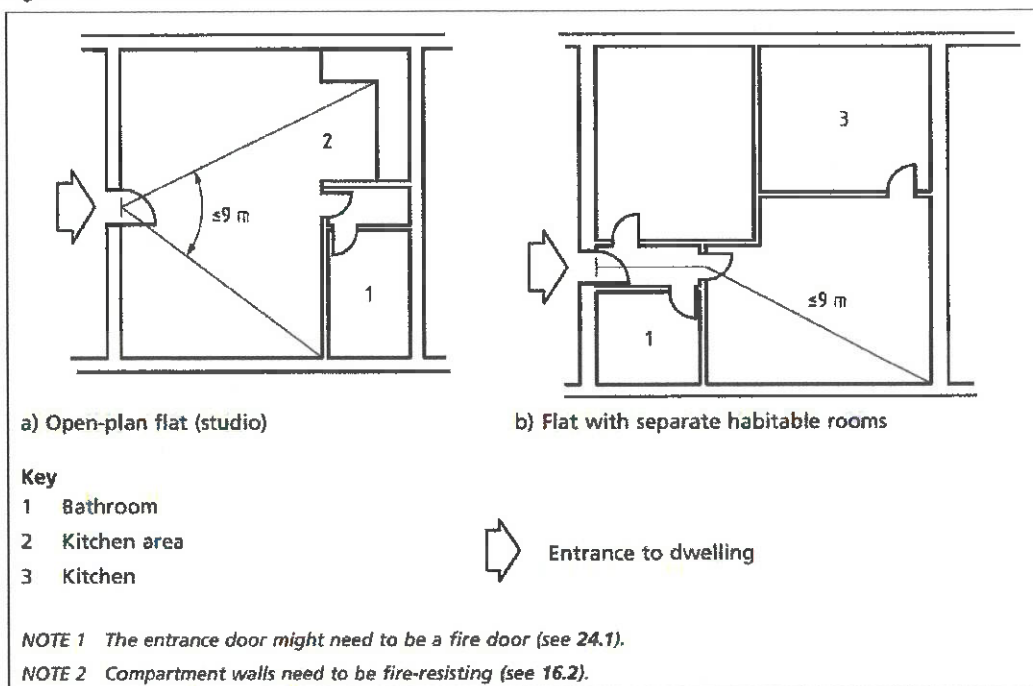
Sprinklers are a prescriptive requirement where the following measures are exceeded/not met:

- Building top floor height over 30m (Regulation B3)
- Dead end distance within the Cluster exceeds 9m (Regulation B1)
- Where the internal layout is open plan (Regulation B1)

The proposed top floor height is significantly less than 30m in and the travel distance within the cluster is less than 9m.

The “shared living” units are configured such that the bedrooms are an inner room off a shared living room/ kitchen and the kitchen hob is c800mm from the bedroom door and would not be considered to satisfy the provision of Figure 10 BS 9991 (extract below).

Figure 10 Flat with restricted travel distance



4.0 Recommendations

Having considered the submissions made by the Appellant and BCA I consider that the BCA should be directed to amend Condition 3 as follows and to add a new Condition 7 to read as follows:

Condition 3

~~All student accommodation, common rooms, study rooms and staff areas shall be protected with an automatic fire suppression system in accordance with BS 9251 2014~~

The shared living units where the bedrooms are an inner room off the kitchen/living room shall be provided with a Class 1 BS 9251 2014 sprinkler system and the hob shall not be within 1.5m of the escape route from the bedroom or the design amended to comply with Figure 10 BS 9991 2015.

Reason:

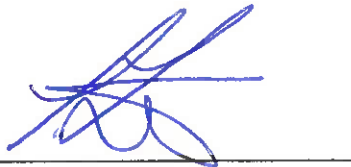
To comply with Section B1 of the Second Schedule to the Building Regulations 1997-2017.

Condition 7

The INTREO office accommodation at 1st floor shall be separated from the residential stair 02 route by way of a vented lobby or an independent stair shall be provided.

Reason:

To comply with Section B1 of the Second Schedule to the Building Regulations 1997-2017.



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Date: 30-01-19

