

FSC Report

ABP 309670-21

Appeal v Refusal or Appeal v Condition(s)	Appeal v Conditions 1, 3 and 4
Development Description	Proposed construction of new Mountmellick Community Nursing Unit (CNU) at St Vincent's Community Nursing Unit at Mountmellick, Co Laois V3YK
An Bord Pleanála appeal ref number:	ABP-309670-21
Building Control Authority Fire Safety Certificate application Ref. No.	29/2020
Appellant & Agent:	Appellant : Health Service Executive Agent : FCC Fire Cert Ltd.
Building Control Authority:	Laois County Council
Date of Site Inspection	NA
Inspector/ Board Consultant:	Stefan Hyde
Appendices	NA

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2.0 Introduction

2.1 Subject Matter of Appeal

This report sets out my findings and recommendations on the appeal submitted by FCC Fire Cert Ltd [hereafter referenced as FCL] on behalf of their Client, Heath Service Executive, against Conditions No. 1, 3 and 4 attached to the Fire Safety Certificate (Ref No. 29/2020) granted by Laois County Council [hereafter referenced as LCC] in respect of proposed construction of new Mountmellick Community Nursing Unit (CNU) at St Vincent's Community Nursing Unit at Mountmellick, Co Laois V3YK

The Conditions, which are the subject of the appeal, read as follows:

Condition 1

A life safety sprinkler system, incorporating quick response sprinkler heads shall be installed throughout the works area forming part of the application. The system shall be designed, installed and maintained in accordance with BS EN 12845 and/or equivalent approved standards

With the stated reason for the condition being:

Reason: To ensure adequate means of escape in the event of fire and to inhibit the spread of fire.

Condition 3

At least two evacuation/escape lifts shall be provided form the upper floor. Evacuation/escape lifts shall not be located with the same protected area/stairway. The evacuation/escape lifts shall be sufficiently remote from each other to ensure that at least one evacuation/escape lift is always available in the event of a fire. The dimension of escape lifts and lobbies shall comply with Figure 9 of Health Technical Memorandum 05-02. All escape lifts shall be designed to comply with the guidance in Health Technical Memorandum 05-03: Part E - 'Escape Lifts' and Health Technical Memorandum 08-02 - 'Lifts'

With the stated reason for the condition being:

Reason: Where very high dependency patients or bariatric patients are accommodated on upper floors, evacuation/escape bed lifts shall be sufficiently remote from each other to ensure that at least one evacuation/escape lift is always available in the event of fire.

Condition 4

Then maximum occupancy of rooms/areas, which accommodate a single escape route complying with 1.2.2.5 of Part B (Fire Safety) of the Second Schedule to the Building Regulations shall be limited to 20 people. Signs indicating this maximum occupancy limit shall be displayed within such areas.

With the stated reason for the condition being:

Reason: In order to avoid occupants being trapped by fire or smoke.

De novo consideration is not warranted, and the Board can rely on the provisions of Article 40(2) of the Building Control Regulations and deal with the appeal on the basis of Conditions 1, 3 and 4 only.

2.2 Documents Reviewed

- 2.2.1 Fire Safety Certificate Application and Supporting Documentation submitted by FCL on behalf of their Client
- 2.2.2 Further Information requests, decision and grant by LCC on 16.02.2021 with 14 conditions attached
- 2.2.3 Appeal submission to An Bord Pleanala by FCL dated 10.03.2021 and 27.04.2021.
- 2.2.4 Appeal submission to An Bord Pleanala by LCC dated 30.03.2021

3.0 Consideration of Arguments by Appellant and BCA

Condition 1

A life safety sprinkler system, incorporating quick response sprinkler heads shall be installed throughout the works area forming part of the application. The system shall be designed, installed and maintained in accordance with BS EN 12845 and/or equivalent approved standards

With the stated reason for the condition being:

Reason: To ensure adequate means of escape in the event of fire and to inhibit the spread of fire.

Insofar as the reason stated in the Grant of Fire Certificate for the imposition of Condition 1 is generic in nature it is considered appropriate to set out, in the first instance, the reasoning of LCC as outlined in more specific detail in their appeal submission to ABP dated 30.03.2021

Case made by LCC in respect of Condition 1

The LCC case for the imposition of Condition 1 is set out in the submission to ABP dated 30th March 2021 and the key points are summarised as follows:

- I. LCC note that the application includes nurses base and subbases and seating/break-out areas located within the escape corridors without any fire separation. LCC contend that this is a deviation from Section 1.2.5 of Technical Guidance Document B 2020 which requires that corridors serving bedrooms in Residential (Institutional) occupancies which includes residential care buildings should be constructed as "protected corridors". LCC consider that the presence of the nurses bases and breakout seating areas within the corridors contravenes the requirements of a protected corridor and on that basis they contend that the imposition of sprinkler protection is justified. It is unclear however why LCC consider that sprinkler protection is required throughout the development, as is required by Condition 1, in circumstances where their concern relates to items located within the corridor. It is also questionable as to the benefit of sprinklers in dealing with a fire outbreak in the corridor as the corridor would likely be smoke logged prior to activation of the sprinklers.
- II. LCC also take issue with the presence of the Reception Area i.e. reception desk and seating - within the 2 storey entrance foyer which LCC describes as an "*atrium*". LCC contend that sprinkler protection is warranted to mitigate the risk from the reception facilities. Again, it is unclear as to why LCC consider that the reception feature would warrant sprinkler protection throughout the development as is required by Condition 1.
- III. LCC also refer to the potential presence of bariatric residents on both floors and note the potential difficulty in manual lifting of such persons. LCC contend that sprinkler protection is warranted to mitigate this risk.

Case made by FCL in respect of Condition 1

For their part FCL respond to the issues raised by LCC as follows:

I. FCL contend that the corridors are in fact "*protected corridors*" as defined in TGDB (see extract from 1.0.9 of TGDB below) insofar as the corridors are enclosed with fire rated partitions and self-closing fire doors.

"Protected corridor/lobby - A corridor or lobby which is adequately protected from fire in adjoining accommodation by fire-resisting construction."

FCL correctly note that TGDB does not explicitly state that the corridor shall not contain any fire load such as the Nurses bases/subbases and the breakout seating areas.

- II. Regarding the Nurses bases and breakout areas, FCL contend that the fire risk is adequately controlled/mitigated having regard to the following:
 - FCL state that breakout areas are to be confined to 2 chairs and a non-combustible table and FCL confirm that any upholstery in the chairs will be rated as satisfying Ignition Source 7 (i.e. the highest fire resistance classification identified in BS7176 as suitable for High hazard applications) in accordance with BS71716:2007 + A1 in addition to the foam filling complying with Irish statutory requirements for foam filling materials. FCL also state that any drapes/curtains will achieve the highest Type C performance rating to BS5867, and any textile floor coverings will achieve the highest classification to BS5287 i.e. "a low radius of effect of Ignition". FCL confirm that their client will manage these areas in accordance with the foregoing.
 - Regarding the Nurses' bases/subbases, FCL again contend that the fire risk is negligible as these areas will not, they say, be used for administrative purposes but rather will contain a computer for accessing and inputting resident records and a fire alarm repeater panel. FCL note that Nurses bases are a common feature in corridors in CNUs and other Nursing Homes and are an essential part of the resident observation infrastructure.
 - FCL also note that the UK England Guide Fire Safety Risk assessment: Residential Care Premises explicitly addresses these issues in Section 1.11 and identifies that corridors which afford alterative routes of escape – as is the case in this instance may contain small quantities of upholstered furniture complying with BS7176 and small items of electrical equipment. FCL contend that this further supports their design proposals.

In summary FCL contend that the fire risk from these facilities is very low and does not warrant sprinkler protection.

III. Regarding the reception area and associated accommodation stairs FCL contend that this is not an "atrium" but rather is a protected shaft separated from the accommodation at both floor levels by EI60 rated compartment walls and FD60S rated doorsets. FCL also note that TGDB explicitly allows in Section 1.3.6.5(c) for the presence of reception area of less than 10sqm in protected stairways and FCL note that the Reception Desk being proposed satisfies this criterion. In relation to the seating at ground floor reception, FCL state in their ABP appeal that this will comprise a non-combustible table and that the seats will be non-upholstered and will be of limited combustibility. FCL thus argue that the seating area constitutes a negligible fire risk

IV. Regarding the more general issue of the provision of sprinklers in residential care premises – which typically will accommodate many residents with mobility impairment including some bariatric residents – FCL note that sprinklers are not a requirement of TGDB and contend that their design complies with TGDB. Accordingly, they argue that LCC are acting outside of the guidance by seeking to impose sprinkler protection. FCL also reference previous ABP appeals FS.29B.FS05245, FS.29B.FS0530, FS.29B.FS0572, and ABP-301450-18 in which An Bord has upheld appeals against the imposition of sprinkler protection.

Condition 3

At least two evacuation/escape lifts shall be provided from the upper floor. Evacuation/escape lifts shall not be located with the same protected area/stairway. The evacuation/escape lifts shall be sufficiently remote from each other to ensure that at least one evacuation/escape lift is always available in the event of a fire. The dimension of escape lifts and lobbies shall comply with Figure 9 of Health Technical Memorandum 05-02. All escape lifts shall be designed to comply with the guidance in Health Technical Memorandum 05-03: Part E - 'Escape Lifts' and Health Technical Memorandum 08-02 - 'Lifts'

With the stated reason for the condition being:

Reason: Where very high dependency patients or bariatric patients are accommodated on upper floors, evacuation/escape bed lifts shall be sufficiently remote from each other to ensure that at least one evacuation/escape lift is always available in the event of fire.

Case made by LCC in respect of Condition 3

The LCC case for the imposition of Condition 3 is set out in the submission to ABP dated 30th March 2021 and the key points are summarised as follows:

The imposition by LCC of this condition arises from their concern regarding the proposal to accommodate bariatric residents at first floor level. In this regard it is noted that bedrooms 0.12 and 0.15 are denoted as being designed for bariatric residents.

LCC refer to Section 3.49 of HTM05-02 *Health Technical Memorandum 05-02: Firecode Guidance in support of functional provisions (Fire safety in the design of healthcare premises)* in support of their position.

Case made by FCL in respect of Condition 3

For their part FCL argue that HTM05-02 is not the relevant guidance for residential care premises but rather is referenced in TGDB for the design of hospitals. FCL point out that there are substantial differences between hospital design and the design of residential care facilities - e.g. lesser travel distances allowed for residential care premises, protected corridors required in residential care premises – and that HTM05-02 is therefore not relevant to this design.

FCL note that the proposal to design the two main passenger lifts as evacuation lifts is a particular Client operational management decision and is not required to comply with Part B of the Second Schedule i.e. is not a requirement of TGDB.

Condition 4

Then maximum occupancy of rooms/areas, which accommodate a single escape route complying with 1.2.2.5 of Part B (Fire Safety) of the Second Schedule to the Building Regulations shall be limited to 20 people. Signs indicating this maximum occupancy limit shall be displayed within such areas.

With the stated reason for the condition being:

Reason: In order to avoid occupants being trapped by fire or smoke.

Case made by LCC in respect of Condition 4

It is noted that the FCL appeal relates only to the second part of this Condition which requires the erection of an occupant limit sign in the rooms in question.

The LCC case for the imposition of Condition 1 is set out in the submission to ABP dated 30th March 2021.

LCC appear to be concerned that the rooms in question, which are identified as having an occupant level of 20 persons in the FCL Compliance Report, have potential, based on floor area, to accommodate more than 20 persons and therefore LCC consider that a sign is required to assist management in ensuring that the facility is managed in accordance with this limit.

Case made by FCL in respect of Condition 4

FCL argue that then provision of signs is unnecessary, and that management can be relied upon to adhere to the occupant limit of 20 persons. They also argue that the erection of an occupant limit sign would detract from the homeliness of the premises.

4.0 Assessment

Having reviewed the arguments advanced by LCC and FCL I have concluded as follows:

i. Condition 1:

I concur with the FCL assessment that the provision of sprinkler protection is not a requirement of TGDB for a residential care premises of this scale. Furthermore, I concur with the FCL assessment that the fire risk arising from the presence of the Nurses bases and the Breakout areas in the corridors and the reception area in the entrance foyer is adequately mitigated based on the proposals set out in the FCL submission regarding the restricted content of these areas and the fire endurance of materials to be used in the fit-out.

Regarding the proposal to accommodate 2 bariatric resident rooms on the ground and first floors I note that these rooms are served by room doors and corridors of sufficient width to enable bed evacuation from the room to adjacent fire compartments if the resident is of a weight which does not facilitate other manual methods of evacuation by staff. It is further noted that the rooms have access to alternative routes of escape to alternative adjacent fire compartments and indeed can be moved to a compartment separated from the compartment of origin by 2 compartment walls. Accordingly, the bariatric residents can in my view be safely evacuated by staff in a progressive horizontal mode pending arrival of the fire service to assist with vertical evacuation by stairs or lift should that be necessary.

Based on the foregoing, I consider that the imposition of sprinkler protection is not warranted, and I conclude that the appeal against Condition 1 should be upheld.

ii. Condition 3

I concur with the FCL assessment that the provision of evacuation lifts is not a requirement of TGDB for this category of building use and that the provision of the evacuation lifts as proposed in the FSC application is a HSE operational requirement and is not arising from an obligation of Part B of the Building Regulations.

It is noted that the first floor is served by two dedicated evacuation staircases which are sized to cater for mattress evacuation, and which afford alternative routes of escape for all rooms at first floor level, including for the assisted evacuation of bariatric residents.

Based on the foregoing, I conclude Condition 3 is not warranted and that the appeal against this condition should be upheld.

iii. Condition 4 (i.e. appeal against the part relating to occupant limit signage)

I note that FCL refer to these rooms potentially being used for the like of "Christmas gatherings" in their footnotes to Table 1.1 of their Compliance Report Revision D. I also note that the rooms in question have a floor area which could accommodate occupant number exceeding 20 persons.

In those circumstances I consider that the imposition of a requirement to erect an occupant number notice is justified and ought not to detract from the homeliness aspect of the premises having regard to the requirement to erect other statutory fire safety signage such as fire extinguisher signs, fire action notice etc.

Accordingly, I conclude that the appeal of Condition 4 should be refused.

5.0 Conclusion/Recommendation

Considering the foregoing assessment, I conclude that the appeal in relation to Conditions 1 and 3 should be upheld and the appeal against Condition 4 should be refused.

6.0 Reasons and Considerations

Condition 1

A life safety sprinkler system, incorporating quick response sprinkler heads shall be installed throughout the works area forming part of the application. The system shall be designed, installed and maintained in accordance with BS EN 12845 and/or equivalent approved standards

Taking account of the guidance in Technical Guidance Document B and having regard to the mitigation measures being proposed in relation to the break-out areas, the nurses bases and the reception area, I conclude that the imposition of sprinkler protection is not warranted and that the appeal should therefore be upheld.

Condition 3

At least two evacuation/escape lifts shall be provided from the upper floor. Evacuation/escape lifts shall not be located with the same protected area/stairway. The evacuation/escape lifts shall be sufficiently remote from each other to ensure that at least one evacuation/escape lift is always available in the event of a fire. The dimension of escape lifts and lobbies shall comply with Figure 9 of Health Technical Memorandum 05-02. All escape lifts shall be designed to comply with the guidance in Health Technical Memorandum 05-03: Part E - 'Escape Lifts' and Health Technical Memorandum 08-02 - 'Lifts'

Taking account of the guidance in Technical Guidance Document B and having regard to the availability of alternative horizontal escape routes suitable for bed movement from the bariatric rooms, I conclude that the imposition of a requirement for evacuation lifts in accordance with Condition 3 is not warranted and that the appeal should therefore be upheld.

Condition 4

Then maximum occupancy of rooms/areas, which accommodate a single escape route complying with 1.2.2.5 of Part B (Fire Safety) of the Second Schedule to the Building Regulations shall be limited to 20 people. Signs indicating this maximum occupancy limit shall be displayed within such areas.

Having regard to the floor area of the rooms in question and the applicants stated potential use of these rooms for larger gatherings such as at Christmas time, I consider the erection of an occupant limit notice is justified and on this basis the appeal should be refused.

7.0 Conditions

The Building Control Authority should be directed to remove Conditions 1 and 3 and to retain Condition 4 as is.

STEFAN HYDE

Chartered Engineer I BA, BAI, PDip FSP, MA, CEng, MIEI Consultant/Inspector

Date : _____