

Revised Fire Safety Certificate for a proposed 7 storey office development over basement carpark at Block 14 C1, Hanover Quay, Dublin 2

Consideration of Appeal against Conditions 1, 3, 10 & 11 attached to Fire Safety Certificate (Reg Ref: FA/15/1581/REV)

MSA Reference > 16019

ABP Reference > FV0011

For An Bord Pleanála

MMS

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1 INTRODUCTION

This report sets out my findings and recommendations on the appeal submitted by G. Sexton & Partners Ltd. (GSP) against Conditions 1, 3, 10 & 11 attached to the Revised Fire Safety Certificate (Reg Ref No. FA/15/1581/REV) granted by Dublin City Council on 21st March 2016, for the proposed 7 storey office development over basement carpark at Block 14 C1, Hanover Quay, Dublin 2.

1.1 Subject of Appeal

An application was made by G. Sexton & Partners Ltd. to Dublin City Council on 14th December 2015 for a Revised Fire Safety Certificate (Reg Ref No. FA/15/1581/REV) granted by Dublin City Council on 21st March 2016, for the proposed 7 storey office development over basement carpark at Block 14 C1, Hanover Quay, Dublin 2 where the proposed design was subject to an initial Fire Safety Certificate application approved under Fire Safety Certificate FSC No. 2302/15 (Reg Ref No. FA/15/1358). The revised application was made cover the following main changes to the design;

- No. of stairways reduced from 4No. 1400mm wide stairways to 3No. 1800mm stairs. The design basis and requirements remained identical to that previously approved with the reduction in stair being offset by the wider width resulting in identical capacity.
- Revisions were also proposed to the main entrance, whereby the original wedge shaped alcove entrance was being filled in.
- Rearrangement of basement carpark and ancillary room layout (including removal of previously approved basement Gym).

The Revised Fire Safety Certificate granted on 21st March 2016 with 11No. Conditions attached, 4 of which are the subject of this appeal. The conditions being appealed are;

Condition 1: *“An L1 fire detection and alarm system complete with associated manual call points shall be provided. The system shall be designed, installed and maintained in accordance with I.S. 3218 2013.*

Reason: *To comply with Part B1 of the Second Schedule to the Building Regulations, 1997 to 2014”*

Condition 3: *“The emergency exit doors and doors leading to emergency exits shall be free from fastening and be fitted with panic bolts complying with IS EN 1125 2008 and shall open in the direction of escape or be held open at all material times. The use of any other device or apparatus is strictly prohibited.*

Reason: *To comply with Part B1 of the Second Schedule to the Building Regulations, 1997 to 2014”*

Condition 10: *“All final exit doors to Stairs 1 & 3 at ground floor level are to be minimum 2300mm in width.*

Reason: *To comply with Part B5 of the Second Schedule to the Building Regulations, 1997 to 2014”*

Condition 11: *“Any future subdivision of any floor levels in separate tenancies must be accompanied by a new Fire Safety Certificate, before any subdivision works begin.*

Reason: *To comply with Part B1 of the Second Schedule to the Building Regulations, 1997 to 2014”*

1.2 Documents Reviewed

Fire Safety Certificate Application and Supporting Documentation

- Application for a Fire Safety Certificate to Dublin City Council submitted on 14th December 2015 comprising of;
 - Fire Safety Certificate Compliance Report; prepared by G. Sexton & Partners Ltd. (December 2015)
 - Plans, Sections and Elevations; by G. Sexton & Partners Ltd.
- Dublin Fire Brigade Report dated 15th March 2016 with recommendation to grant the FSC subject to 11 Conditions.
- Appeal submissions to An Bord Pleanála
 - Submission dated 19th April 2016 lodged by G. Sexton & Partners Ltd.
 - Submission dated 16th May 2016 lodged by Dublin City Council
 - Submission dated 3rd June 2016 by G. Sexton & Partners Ltd.

1.2 FINDINGS & RECOMMENDATIONS

2.1 Condition 1

“An L1 fire detection and alarm system complete with associated manual call points shall be provided. The system shall be designed, installed and maintained in accordance with I.S. 3218 2013.

Reason: *To comply with Part B1 of the Second Schedule to the Building Regulations, ‘1997 to 2014”*

2.1.1 Case made by Appellant

The Appellant’s case is based on the following key points:

- a) The design does not incorporate any fire engineering solutions that would require a category L1 fire alarm system. The design complies with the prescriptive provisions set out in the relevant standards.
- b) No sleeping risk is proposed within the premises.
- c) It is not expected that the building will cater for large numbers of members of the public.
- d) Occupants of the office building shall be awake and familiar with the premises.

- e) The category of system provided should be appropriate to the use of the building, it is considered that a category L1 system is warranted only where the use or design contains a higher risk than normal (i.e. nursing homes, large hotel, large number of members of the public, fire engineered solutions to reduce response times etc.). BS 5888 Part II and BS 9999 provides general guidance for office buildings and states a minimum range between Type M to Type L3 coverage. A category L2/L3 was submitted to be appropriate in this instance.

2.1.2 Case made by the Building Control Authority

In the Dublin Fire Brigade submission of 16/05/2016 the reasoning for the attachment of this Condition is stated to be:

- a) The building is of multi-disciplinary occupancy catering for carpark / storage at basement level, office and enterprise units at ground floor level, open plan office layout on the 1st, 2nd, 3rd, 4th, 5th and 6th floor levels. The building consists of four different purpose groups.
- b) The height of the top floor is at 25.5m which requires enhanced fire fighting provisions therefore enhanced warning should be incorporated.
- c) The occupancy numbers proposed within the granted fire safety report exceed 2500 personnel, therefore a large number of people may be present within the building at any given time.
- d) The granted fire safety report proposed that the fire alarm system would be designed, installed and certified in accordance with IS 3218 2013. Annex I of IS 3218 2013 advises on best safety practice on the type of alarm system which should be installed within premises. For large and complex buildings an L1 fire alarm system is suggested to be installed. Given the nature and size of the building Dublin Fire Brigade are of the opinion that the building is of a large/complex building status.

Dublin Fire Brigade also contend that the appeal against Condition 1 should be invalidated as the same Condition which was attached to the original Fire Safety Certificate (FA/15/1358) was not appealed and therefore still stands.

The Appellant in their response of 03/06/2016 to the Dublin Fire Brigade comments disagree with the points made in the Dublin Fire Brigade submission and contend that the building is not a large and complex building as per the reference to same in IS 3218 2013.

The Appellant notes correctly that the building is an office building with ancillary carparking and storage areas at basement levels. The reference by Dublin Fire Brigade to the enterprise units at ground level relates to two small own door units which have no connection with the ground floor office areas or other internal areas.

2.1.3 Findings and Recommendation

A key issue in this case is the interpretation of IS 3218 2013 and its applicability to the design of this building. IS 3218 in Section 1 Scope notes that *“This standard provides requirements and recommendations for the planning, design, installation, commissioning, servicing and maintenance of fire detection and alarm systems in premises including those used for residential/domestic purposes. The Standard does not recommend whether or not a fire alarm system should be installed in any given building (see Building Regulations, Technical Guidance Document B).”*

Furthermore, in Annex I, which is being referenced to by Dublin Fire Brigade, it is noted that;

- the Annex is “informative”
- the information provided in the Annex is for illustrative purposes only, it is not intended to constitute recommendations. The information reflects current “best fire safety practice” and the conventional interpretation of fire safety legislation.

In the table in Annex I it gives a number of examples of typical system Types noting for “other buildings” which includes offices, the system category could be in range L1 to L4 with L1 systems “often provided in large or complex buildings”.

The key reference therefore in this case in Technical Guidance Document B (as noted in Section 1 of IS 3218) which states in 1.4.14.1 that *“buildings should be provided with a fire detection and alarm system to warn the occupants of the existence of fire where the building is of such a size, layout or occupancy that the fire itself may not provide adequate warning to the occupants so as to enable them to escape safely”*.

In later sections of 1.4.14 more detailed guidance is given for;

- a) residential (institutional) buildings (not applicable in this case)
- b) mixed use building - system type to be appropriate to the nature of the occupancy and to building layout and construction size
- c) buildings containing flats or maisonettes (Not applicable in this case)
- d) buildings containing an atrium where reference is made to BS 5588 Part 7 (not applicable in this case)

Technical Guidance Document B in turn cites in 1.1.5, BS 5588 Part 11 as being the applicable Code for design of means of escape for compliance with B1 Means of Escape in Case of Fire. BS 5588 Part 11 recommends (in office buildings) provision of a Type M fire alarm system to BS 5839 Part I as a minimum and a Type L3 system as a maximum in buildings where a phased evacuation strategy has been adopted.

It is noted that Type M (manual only) and Type L3 systems have essentially the same interpretation in terms of level of coverage required in both BS 5839 Part I and IS 3218 2013.

Accordingly having regard to the recommendation in the foregoing references and to the functional requirements in BI Means of Escape in Case of Fire of the Building Regulations, Dublin Fire Brigade have been unduly conservative and onerous in applying this Condition.

On the other hand, they have neglected to recognise the need to include specific reference to the particular requirement to refer to the mixed use occupancy in categorising the system.

In my opinion a Type L3 system is adequate to achieve compliance in the building with the additional provision of meeting the particular requirements for multi-occupancy (enterprise units, office use etc.)

In regard to the submission by Dublin Fire Brigade that the appeal of this Condition should be invalidated given that the same Condition was attached to the original Fire Safety Certificate and was not appealed, this in my opinion has no validity.

Recommendation

The Condition should be amended to read;

“A Type L3X fire detection and alarm system, designed, installed and commissioned in accordance with IS 3218 2013 shall be provided in the building.

Reason: *To comply with Part B1 of the Second Schedule to the Building Regulations, 1997 to 2014”*

2.2 Condition 3

“The emergency exit doors and doors leading to emergency exits shall be free from fastening and be fitted with panic bolts complying with IS EN 1125 2008 and shall open in the direction of escape or be held open at all material times. The use of any other device or apparatus is strictly prohibited.

Reason: *To comply with Part B1 of the Second Schedule to the Building Regulations, 1997 to 2014”*

2.2.1 Case made by Appellant

The Appellants case is that requirements of this Condition are in excess of the recommendations in Technical Guidance Document B, BS 588 Part 11 and the more current BS 9999.

They note that the basis of their design is Technical Guidance Document B which they are contending has been complied with in the design submitted.

2.2.2 Case made by the Building Control Authority

The response by Dublin Fire Brigade in their submission of 17/05/2016 is confusing in relation to their argument on door fastenings where they make no reference to 1.4.3.2 of Technical Guidance Document B which deals specifically with this issue.

On the other hand, they refer to 1.4.3.3 of Technical Guidance Document B and appear to acknowledge that this section only requires certain doors to open in direction of escape i.e. in the instance exit doors from a place of special fire risk or doors where more than 50 persons are expected to use them.

2.2.3 Findings and Recommendations

The requirements of this Condition as currently worded are excessive and not in accordance with the recommendations in 1.4.3.2 (Door Fastenings) and 1.4.3.3 (Direction of Opening) of Technical Guidance Document B.

Accordingly, I recommend that the Building Control Authority be directed to amend this Condition to read as follows:

“Doors on escape routes are to comply with 1.4.3.2 of Technical Guidance Document B with respect to door fastenings and with 1.4.3.3 of Technical Guidance Document B with respect to direction of opening.

Reason: *To comply with Part B1 of the Second Schedule to the Building Regulations, 1997 to 2014”*

2.3 Condition 10

“All final exit doors to Stairs 1 & 3 at ground floor level are to be minimum 2300mm in width.

Reason: *To comply with Part B5 of the Second Schedule to the Building Regulations, 1997 to 2014”*

2.3.1 Case made by Appellant

The Appellant's case is that this additional 500mm width to the corridor to facilitate fire fighter access to the fire and rescue mustering point (FF lift lobby) at ground level, does not apply to the final exit door which they suggest can be 1800mm, being the width of the stairs.

The Appellant suggests that the reference in the Codes (BS 5588 Part 5 and BS 9999) is to an increase in width of corridor by 500mm being only required i.e. on the basis that the Codes do not specifically mention the final exit door width. The Appellant contends that the “clash” between fire fighters and persons escaping will then only occur momentarily at the final exit, with fire fighters being able to move freely along the wider (2300mm) corridor.

2.3.2 Case made by the Building Control Authority

Dublin Fire Brigade in their submission of 17/05/2016 refer to Section 1.4.7 of Technical Guidance Document B and contend that the final exit should be not less in width than the escape routes they serve.

2.3.3 Findings and Recommendation

The key issue here is the interpretation of BS 5588 Part 5 and BS 9999 and the intention of Code in this provision. Figure 6(ii) in BS 5588 Part 5 identifies that with corridor access to the fire fighting lobby the corridor should be 500mm wider than that needed for means of escape. While the entrance door to the corridor as illustrated in this figure appears to be the same width as the corridor, such a requirement is not referenced in the text of the clause.

In figure 6(i) where access to the stair is directly from open air, there is no mention of making the entrance door 500mm wider than the stair, to mitigate against localised dash between fire fighters and persons evacuating via the stairs.

In my opinion the Dublin Fire Brigade's submission by reference to Section 1.4.7 of Technical Guidance Document B, that the final exit should be not less than the escape route served by the exit, does not support the case for this Condition.

The exits serviced by these final exit doors (being the stairs) are 1800mm width, so accordingly, on this basis, 1800mm clear width should be sufficient.

I am satisfied therefore that the requirements of the Condition are in excess of the recommendation in the relevant Codes and Guidance and in excess of the requirements of Part B (Fire) of the Second Schedule to the Building Regulations 1997-2014.

Recommendation

On the basis of the foregoing considerations I recommend that the Building Control Authority be directed to remove this Condition.

2.4 Condition 11

“Any future subdivision of any floor levels in separate tenancies must be accompanied by a new Fire Safety Certificate, before any subdivision works begin.

Reason: *To comply with Part B1 of the Second Schedule to the Building Regulations, 1997 to 2014”*

2.4.1 Case made by Appellant

The Appellant contends that there is no requirement for such a Condition on the basis that the Building Control Regulations are clearly requiring that a Fire Safety Certificate be obtained for future subdivision works.

The Appellant also notes that the wording of this Condition could prevent a future applicant using a 7day Fire Safety Certificate Application option allowed under the Building Control Regulations.

2.4.2 Case made by the Building Control Authority

Dublin Fire Brigade in their submission of 17/05/2016 contend that they are entitled to attach Conditions, invoking the requirements of the Building Control Regulations as in this case.

They do suggest however, a revision to the wording of the Condition to include reference to a “new Fire Safety Certificate Application” rather than “Fire Safety Certificate”.

2.4.3 Findings and Recommendation

I am in agreement with the Appellant that there is no requirement for this Condition in so far as the Building Control Regulations 1997-2014, clearly impose an obligation to obtain a Fire Safety Certificate in this instance. Furthermore, the Condition wording (Original and proposed Dublin Fire Brigade revised wording) does not strictly reflect the requirements of the Building Control Regulations.

Recommendation

I accordingly recommend that the Building Control Authority be directed to remove this Condition.

Signed: _____

Michael Slattery, BE MSc (Fire Eng) CEng FIEI MSFPE EUR ING