



Fire Engineering Consultants

**Appeal Against Decision to Refuse a Revised
Fire Safety Certificate (FA/15/1530/REV)**

Appeal Ref: FS29B. FV0009

Project **The Observatory, Windmill Lane
(South), Dublin 2**

Local Authority **Dublin City Council**

Date **31st March 2016**

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1.0 INTRODUCTION

The project involves a Revised Fire Safety Certificate to a previously granted Fire Safety Certificate (Reg ref FSC 1281/15). The previously approved fire cert was for the material alteration change of use from existing live/work units to enterprise office units and associated material alterations to an existing 6 storey building. This included providing an alternative means of escape for the top storey.

A Revised Fire Safety Certificate application for additional alterations was refused by Dublin City Council on the 11th December 2015. The following reason was attached:-

Reason:

The building or works do not comply with the requirements of Part B of the Second Schedule to the Building Regulations, 1997 to 2013, with respect to the following:

Part B1: Means of escape in case of fire: Escape routes are insufficiently protected.

The appeal is against this reason of refusal.

2.0 INFORMATION REVIEWED

In assessing this appeal the following information was considered:-

- Fire safety certificate application including
- Drawings submitted 10th March 2015
 - OS Site Location Map
 - Existing Ground Floor Plan
 - Existing First Floor Plan
 - Existing Second Floor Plan
 - Existing Third Floor Plan
 - Existing Fourth Floor Plan
 - Existing Fifth Floor Plan
 - Existing Roof Floor Plan
 - Existing East Elevation
 - Existing South Elevation
 - Existing West Elevation
 - Existing North Elevation
 - Existing Section A-A
 - Proposed Ground Floor Plan
 - Proposed First Floor Plan
 - Proposed Second Floor Plan
 - Proposed Third Floor Plan
 - Proposed Fourth Floor Plan
 - Proposed Fifth Floor Plan
 - Proposed Roof Floor Plan
 - Proposed East Elevation
 - Proposed South Elevation
 - Proposed West Elevation
 - Proposed North Elevation
 - Proposed Section A-A
 - Proposed Site Plan
- Additional information letter dated 10th March 2015
- Revised Fire safety certificate application including
- Drawings submitted 13th November 2015
 - OS Site Location Map
 - Site Layout Plan
 - Proposed Ground, First & Second Floor Plans
 - Proposed Third, Fourth & Fifth Floor Plans
 - North & South Elevations
 - West & East Elevations
 - Section A-A
- Fire Safety Certificate refusal dated 14th December 2015
- Maurice Johnson & Partners letter to Fire Officer dated 17th December 2015
- Email conversation between Maurice Johnson & Partners and the Fire Officer 16th – 21st December 2015
- Appeal submission from Maurice Johnson & Partners dated 11th January 2016

3.0 DISCUSSION

The building is an existing 6 storey development with a single stair which consisted of live work units.

3.1 Reason for Refusal

The reason stated on the official refusal was

“The building or works do not comply with the requirements of Part B of the Second Schedule to the Building Regulations, 1997 to 2013, with respect to the following:

Part B1: Means of escape in case of fire: Escape routes are insufficiently protected.”

Subsequent discussions between the BCA and the appellant (via email) would appear to indicate that the main cause of contention was the fact that the retail and office unit at ground floor now connected with the single stair, where previously it didn't.

3.2 Single Stair Code Guidance

3.2.1 Building Height

The building is a 6 storey single stair building. However the ground floor does not communicate with the stairs and the 5th floor is provided with two alternative means of escape to the adjacent building which is under the same ownership.

Section 10.2.4 2) ii) of BS5588: Part 11 states that in an office building comprising not more than 5 storeys above the ground storey:-

“Every storey at a height greater than 11m has an alternative means of escape”

The 4th floor has a height above ground of 12m, i.e. greater than 11m. However this is an existing situation and was approved in the previous Fire Safety Certificate (Ref: FSC/1281/15).

3.2.2 Lobby Protection

In addition to this, section 9.6.2 of BS 5588 Part 11, recommends that a protected lobby is provided to the stair on all levels except the top storey, where it is the only stair serving the building.

3.2.3 Mixed Uses

The introduction of the link between the retail unit and stair at ground means introduces an additional risk to the occupants on the floors above. The guidance in BS 5588 Part 11 is vague on this, however, more precise guidance is provided Technical Guidance Document B.

TGD B permits the sharing of stairs between purpose groups. Limitations are placed on buildings where one of the purpose groups are either residential or assembly and recreation. Where the number of floors above ground is not more than four, stairs could be shared between a retail unit and residential units where:

- The stairway is separated from each occupancy by a protected lobby. And
- Automatic fire detection is provided throughout.

In this instance as the fifth floor has an alternative means of escape, the fact that the stair is shared with the retail unit is irrelevant. Therefore, as the retail unit on ground shares a single stair with four office floors above, this can be no worse than a TGD B compliant situation of a retail unit with four floors of apartments above.

It should also be noted that other well established Building Regulations Guidance documents in England & Wales and Northern Ireland would allow sharing of stair between retail and office uses. They only recommend independent stairs in Residential and Assembly building.

The proposals include for lobby protection to the stair on all floors. In addition the building is provided with an L1x fire detection and alarm system, which is in excess of the minimum code requirement of L2/L3 x.

In conclusion therefore, the only area where the building design in my opinion does not comply with code guidance is the fact that the highest storey served by a single stair is 12m above ground instead of 11m.

3.3 The BCA's Case

The BCA states that travel distances are exceeded but does not state where. However, there were no changes to travel distances on the upper floors from the previously approved design. Travel distances at ground floor are within recommended limits.

He also states however, that as the stair is the only stair serving floors 1 to 4, that it should be provided with a protected lobby on every floor other than the top. The BCA is correct on this point.

3.4 The Appellants Case

As part of his appeal the appellant has submitted a Quantified Risk Assessment. It is noted that this was not part of the original application and therefore, the BCA did not have an opportunity to assess it. Notwithstanding that, the results of the analysis appear plausible.

However, the appellant is suggests that it could be argued that lobby protection to a single stair office building is not required to comply with BS 5588 Part 11. I would not agree with this assertion and the BCA is correct.

However, this is a somewhat irrelevant point in that the design proposes lobby protection at each level.

3.5 Summary

As discussed above the only area of non-compliance with code guidance is the fact that the height to the top storey served by the single stair is 12m instead of 11m. It is important to note the guidance in BS 5588 Part 11 and indeed TGD B is non prescriptive and was never intended to cover all building designs. In my opinion therefore, the provision of L1 aspirating smoke detection alone, provides adequate compensation for an additional 1m of the fourth floor above 11m. Whilst the appellant also states that voice alarm is provided in the building, this system, whilst better than standard sounders, is not as effective in office buildings as in public buildings.



RECOMMENDATIONS

It is recommended that the appeal is upheld and the BCA is directed to grant the Revised Fire Safety Certificate.

Signed
Martin Davidson
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Date 31 March 2016