

**REPORT TO AN BORD PLEANÁLA**

**ON**

**APPEAL AGAINST REFUSAL OF A REGULARISATION CERTIFICATE**

**ISSUED BY FINGAL COUNTY COUNCIL**

**FOR**

**REGULARISATION OF ORIGINAL FIRE SAFETY CERTIFICATE (03/4101) FOR THE ADDITION  
OF 8 NO. ADDITIONAL APARTMENTS AND THE INCREASE IN HEIGHT FROM FOUR  
STOREYS TO FIVE STOREYS OF BLOCK 3, COLLEGEWOOD, CASTLEKNOCK.**

Client: An Bord Pleanála  
An Bord Pleanála Ref: Fg 0020  
Our Ref: CTA1642  
Date: NOV 2016

## **1.0 BACKGROUND**

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This Report sets out my findings and recommendations on the appeal submitted by McCrosson O'Rourke Manning Architects (MCORM) on behalf of Kimptonvale Ltd. against a refusal by Fingal County Council (FCC) to grant a Regularisation Certificate (Register Ref. No: 16/4081/REG) in respect of the construction of additional apartments at Block 3, Collegewood, Castleknock, Dublin 15.

The reason stated for the refusal was:

*"The development does not comply with the design requirements of Part B1-Means of escape in case of fire and Part B5-Access and facilities for the fire service of the Second Schedule to the Building Regulations 1997 to 2014.*

Note: The decision document issued to the applicant is headed 'REFUSAL OF A REGULARISATION CERTIFICATE' and a reason for the refusal is set out on the third page of the document. However, the main text of the document states that '*Fingal County Council .....hereby certifies that the building....will, if constructed in accordance with the plans, documents and information submitted, comply with the requirements of Part B...of the Building Regulations...'*', which is the wording normally set out for the grant of a certificate. However, this report has been prepared on the basis that the submissions on the file make clear that it was the intention of FCC to refuse to grant the Regularisation Certificate and that it is also evident from the comments in the submissions from MCORM that they consider that the application was refused.

### **1.1 SUBJECT MATTER OF THE APPEAL**

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- The application for a Regularisation Certificate was lodged by MCORM on 5<sup>th</sup> May 2016.
- The Refusal to grant a Regularisation Certificate was issued by FCC, dated 15<sup>th</sup> July 2016, with 1 reason given for the Refusal.
- An appeal against the Refusal was submitted by MCORM dated 11<sup>th</sup> August 2016.

## **1.2 DOCUMENTS REVIEWED**

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- Application for Regularisation Certificate lodged by MCORM, with compliance report and drawings.
- Fire officer report/recommendation regarding refusal, dated 13/07/2016, sent to FCC
- Appeal submission by MCORM to An Bord Pleanala, dated 11<sup>th</sup> August 2016
- Submission to An Bord Pleanala by FCC with fire officers report, dated 7<sup>th</sup> September 2016
- History files Reg. Ref. 03/4102 and 05/4227 (relating to similar Blocks 2 and 4 on the same site).

## **1.3 SITE HISTORY:**

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Fire Safety Certificates were granted in 2003 for Blocks 2 and 3 on the site (each with four storeys) and for Block 4 (five storeys). Blocks 2 & 3 were subsequently constructed with five storeys each. Prior to construction of Block 2, a revised Fire Safety Certificate was granted (Reg. Ref. 05/4227) to increase the number of storeys to five, and it was then so constructed. Block 3 was also increased to five storeys, but a revised Fire Safety Certificate was not applied for in respect of that block. The current application is for regularisation of Block 3.

## **1.4 SITE VISIT:**

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As some of the issues raised relate to the layouts and smoke ventilation systems of the stairways, and in order to establish, in particular, how the installed systems operate, I visited the site on 16<sup>th</sup> November 2016. In the event, it was noted on site that the AOVs/smoke shafts shown on the plans within the stairways at each floor level are not in fact provided. The shafts are in place but are general service shafts, enclosed by locked doors at each level.

## 2.0 FINDINGS

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**The case made by the building control authority is summarised as follows:**

**B1: Means of escape:**

- The previously approved FSC Reg Ref 03/4101 was granted based on a small building with a single stairway with no storey greater than 11m and no more than three storeys above the ground storey.
- The building height in this case is 11.6m above ground level and has four storeys above ground storey (a total of five storeys) so the provisions allowed for small buildings do not apply for this design.
- The applicant has referenced BS5588: Part 1: 1990 (for the fire safety design), which recommends in Section 12.2 that the escape routes be pressurised or be constructed as per the details in Figure 12 or 13 of the code. This is not complied with, as the AOV of 1.5sqm has not been provided in the corridors.
- The design does not comply with BS9991: 2015, where Clause 7.4 and Diagram 7 also require 1.5sqm of AOV in the corridors.
- The applicant did not deal with escape routes from flats with corridor or lobby approach in the documentation submitted.
- Outdated Codes of Practice are referenced throughout the compliance report

**B5: Access and facilities for the fire service**

- The consultant has incorrectly stated that the building is under 10m above ground level (actual height 11.6m) therefore the vehicle access requirement as stated is incorrect (should be to 15% of the perimeter of the building for high reach vehicles).
- The consultant did not deal with Clause 5.2.4, Table 5.2 and Diagram 32 of TGDB (access for high reach appliances).

**The case made by the Appellant is summarised as follows:**

**B1: Means of escape:**

- Although it is acknowledged that BS5588 ( as revised by BS9991) does recommend that in residential buildings over 11m in height provision be made for smoke ventilation from common lobbies/corridors (via AOVs and smoke shafts), previous fire safety certificates were granted for Blocks 2 and 4 (each with 5 storeys); the design of Block 3 (the subject of the current appeal) follows the same strategy for means of escape as Blocks 2 and 4, which were constructed without ventilated lobbies/corridors.
- The proposed arrangement complies with Parts (b), (c) and (d) of Clause 12.3 of BS5588: Part 1: 1990, which is the basis of compliance for means of escape in Block 3.
- In relation to Clause 12.3(a) it is noted that although the building is four storeys above ground level it was acknowledged in the submission that the building extends above the 11m height recommended by 600mm.
- A case to deviate from the recommended height limit of 11m was made on the following grounds:
  - The 600mm overrun does not materially impact on the means of escape, and similar precedents for small deviations in height exist in adjacent blocks, which suggests that the fire officer assessing them did not consider it as significant or representing a risk in terms of means of escape. The Board should allow for a consistent interpretation within the development and allow the same interpretation for Block 3.
  - The absence of a Regularisation Certificate (for Block 3) may create an undesirable scenario where three similar blocks within the same development will have been subject to conflicting interpretations in relation to means of escape.
- It is submitted that the request to allow this deviation (with respect to height) was not fully considered by the local authority.

**Part B5: Access and facilities for the fire service:**

- The cover letter with the application noted that ‘the addition of a floor results in increased requirements for vehicle access (15% of perimeter) and access for high reach vehicles under Part B5.2. The site plan indicates vehicle access to the front and both sides of the building which is in excess of 50% of the building perimeter’.
- This arrangement is consistent with that provided for Blocks 2 and 4.
- They submit that the revised access was not fully considered by the local authority.
- It has been demonstrated that the development as constructed is in accordance with the fire safety design adopted in the similar adjacent blocks that were constructed at the same time and that have previously been deemed to comply with the building regulations.

**3.0 CONSIDERATIONS:**

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**B1: Means of escape:**

The compliance reports submitted with previous Fire Safety Certificate applications for Blocks 2 and 4 stated that *‘the building is designed in accordance with BS5588: Part 1 (Clause) 12.3, recommendations for small buildings with a single stair. Max travel distance from apartments to the protected stair enclosure is 4.5m as required by Figure 14’*.

Clause 12.3 relates to buildings with a maximum top floor height of 11m and a maximum of four storeys. The application details for Blocks 2 and 4 showed that both blocks had a top floor height of 10.8m and five storeys. Nonetheless, Fire Safety Certificates were granted (without conditions) in respect of both blocks as submitted. It is considered reasonable in this case to apply the guidance from BS5588: Part 1 to the design of the building, as it was constructed several years ago, rather than the more current recommendations of BS9991 (which now replaces BS5588: Part 1).

The current application relates to Block 3, which has five storeys, but a marginally higher top floor level at 11.6m, due to an increase of 200mm in floor-to-floor height at each level (compared to Blocks 2 and 4). The question arises as to the significance of the limitations on height and on the number of storeys, being the main parameters to be considered when deciding if the recommendations intended for ‘small buildings’ can reasonably be applied.

The limitations on the height of the top floor can be rationalised by the concept that lesser provisions with regard to smoke ventilation can be applied to common escape routes (including those approaching the stairway) when there is a limitation on the distance that persons have to travel within the stairway to reach a place of relative safety outside the building.

It has been generally accepted that where the distance from the flat entrance door to the protected stairway (via a protected lobby or corridor) is limited i.e. less than 4.5m, then smoke ventilation in the lobby or corridor is not required in order to provide safe passage to the stairway. In the case of Block 3, the relevant travel distance is less than 4.5m in all cases.

That distance can be increased if additional protection (e.g. smoke ventilation) is introduced to the corridor/lobby. This is supported by commentary in 14.1 of BS9991: 2015 which notes that *'whilst the primary aim of smoke control in residential buildings is to protect the staircase enclosure.....in extended corridors the primary objective ...is to protect both the common corridor and the staircase enclosure for means of escape'*.

In higher buildings it will take occupants from the top levels longer to travel down the stairway, extending their potential exposure time to smoke that may have entered the enclosure. In the absence of smoke ventilation in an approach corridor (which would reduce the risk of smoke entering the stairway), the risk to persons in the stairway is increased. This risk would be higher where the building had a single stairway, dwellings at significant height and potential for a fire to occur at a much lower floor level. The corollary would be that where the distance of travel within the stairway is significantly lower, the level of risk will be significantly lower. The threshold between 'lower' and 'higher' buildings is understood to be around 11m, as reflected in the codes.

Under a strict application of Clause 12.3, a four storey building with a top floor height of, say, 11.2m would require the same layouts and ventilation provisions as a building of, say, 100m in height. However, the levels of risk as a consequence of building height would be significantly different. In that context, a marginal increase in top floor height to 11.6m (as in Block 3) would not be considered as presenting a materially higher level of risk than a building with a top floor height of 11m. At most, it would result in perhaps one extra stairway step per floor to navigate.

On the basis of the above, it is not considered that the marginal height difference would warrant the inclusion of the additional ventilation provisions necessary in a materially higher building.

In terms of the number of storeys, it is unclear, separately from the issue of height, how the additional storey per se would increase the level of risk in this case. The main single-stairway diagram (Figure 12) in BS5588: Part 1 refers to 'buildings more than 11m in height' but not to the number of storeys in the building. A more material criterion might be the number of dwelling units with access to the stairway at each level, which would increase the level of risk, but that is not stated as a factor in determining the threshold for a 'small building with a single stairway' (except for layouts where the flats directly access the stairway, as in Figure 14 (b) of BS5588: Part 1). In this case, an additional three dwellings are added at fifth floor (at each stairway).

The height restriction itself will normally limit the number of storeys to four, or at most five. With six storeys, the height of the top floor is likely to be in the range of 13m-14m, so in most cases is unlikely to be considered as a 'small building', whereas five storeys is likely in most cases to be only marginally over the 11m limit, and can still reasonably be classified as a 'small building', when assessing the level of risk. Marginally exceeding the recommended height limit of 11m or the recommended number of storeys by one level (from 4 to 5) is unlikely to be taken as a precedent to allow relaxations for buildings of six storeys or more, and is considered as a reasonable threshold for allowing the omission of the more onerous corridor ventilation requirements.

It is noted that each flat is also provided with an internal protected hallway. While this is provided for the purposes of protection of means of escape within the flats, it has the benefit of providing an additional layer of protection to the escape stairway, not otherwise required.

It was noted that the stairways are provided with openable windows of around 1sqm at landing levels. These are top hung with window restrictors, limiting the amount of opening. However, it is considered that the type of restrictor used could be undone with relative ease by the fire service, where necessary.

**Regulation B5: Access and facilities for the fire service:**

While the compliance report submitted with the application states that the building is less than 10m high and provides pump appliance perimeter access of 81m (as opposed to the recommended access of 24m), the cover letter with the application notes that access for high reach appliances is being provided to more than 50% of the perimeter, as opposed to the recommended 15%, based on the additional building height (and notes that this level of access was in fact provided to the as-constructed building, similar to that approved for the adjacent Blocks 2 and 4). The applicant was not requested to amend the compliance report itself to reflect the correct provision.

With regard to Clause 5.2.4, Table 5.2 and Diagram 32 of TGDB (access for high reach appliances), the compliance report notes that the minimum width of roadway is complied with (for pump appliances) as specified in Table 5.2, including width between kerbs and turning widths. The as-built roadways are in compliance with the relevant specifications for high reach appliances, except that the maximum distance to the hardstanding for a high reach appliance is exceeded as per Table 32 of TGDB. The nearest point of the main roadway at the front of the building is around 11m from the building and around 8m at the two side roadways.

As the building is relatively low and has excessive roadway frontage (compared to the 15% recommended) it is considered that reasonable access for high reach appliances is provided (due to the relatively low height of the building, the appliances can deploy additional reach, allowing them to stand a little further away from the building within the available roadway).

It can be argued that the recommendations for high reach appliances are excessive in any case, and that pump appliance access is adequate for a building of this nature. Due to the highly compartmented construction of the building, it is likely that any fire would be confined to one or to a small number of units, which could be located in a part of the building a considerable distance and on another façade from the side on which the recommended 15% access is located.

As the height is only marginally above the 10m recommended limit in TGDB (or 11m recommended in Approved Document B, UK), it would not be unreasonable to provide for pump access only.

BS9991: 2015, Clause 50.1.2 recommends pump appliance access only (regardless of building height) subject to a route from the appliance to any part of a flat (suitable for laying a hose) at no more than 45m (which is met in this case).

On the basis of the above, it is considered that adequate access for fire appliances has been provided.

**4.0 REASONS and CONSIDERATIONS:**

Having regard to the submissions made in connection with the Regularisation Certificate application and the appeal, the type of use and layout of the building, the limited height of the building and the provision with regard to fire service vehicle access, along with review of the previous applications and decisions issued with respect to adjacent blocks of similar design, it is considered that the functional requirements of Parts B1 and B5 of the Second Schedule of the Building Regulations 1997-2014 have been satisfied and that the appeal should be allowed.

**Signed by:**

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COLM TRAYNOR BE FIEI Chartered Engineer

**Date: 22<sup>nd</sup> November 2016**