

REPORT TO AN BORD PLEANÁLA

ON

**APPEAL AGAINST A CONDITION ATTACHED TO A GRANTED REVISED FIRE SAFETY
CERTIFICATE (FSC2467/16/REV)**

ISSUED BY DUBLIN CITY COUNCIL

FOR

**REVISIONS TO THE DESIGN OF THE BUILDING WITH THE PROVISION OF ADDITIONAL
OFFICE FLOOR AREA AT GROUND FLOOR DUE TO THE INTRODUCTION OF TWO CAR
LIFTS IN PLACE OF THE CAR RAMP SERVING BASEMENT LEVELS**

Client: An Bord Pleanála
An Bord Pleanála Ref: FV0013
Our Ref: CTA1653
Date: DEC 2016

1.0 BACKGROUND

This Report sets out my findings and recommendations on the appeal submitted by Jeremy Gardner Associates (JGA) against Condition 1 attached to a Revised Fire Safety Certificate (Register Ref. No: FA/16/1234/REV, FSC2467/16/REV) granted by Dublin City Council (DCC) in respect of the construction of a new office building at Hainault House, St. Stephens Green South, Dublin 2.

Condition 1 states:

“Smoke ventilation shall be provided to the Gym at Upper Basement Level in accordance with section 5.4.3.1 of Technical Guidance Document B”.

Reason:

“To comply with Part B5 of the Second Schedule to the Building Regulations, 1997 to 2014”.

Having considered the drawings, details and submissions on the file I am satisfied that the determination by the Board of this application as if it had been made to it in the first instance would not be warranted, as no significant matters have been noted other than the subject matter of the appeal. Accordingly, I consider that it would be appropriate to use the provisions of article 40(2) of the Building Control Regulations, 1997 in this case.

1.1 SUBJECT MATTER OF THE APPEAL

- The application for a Revised Fire Safety Certificate was lodged by JGA on 3rd May 2016.
- The Revised Fire Safety Certificate was issued by DCC, dated 9th September 2016, with 3 conditions.
- An appeal against Condition 1 was lodged by JGA, received by the Board on 5th October 2016.

1.2 DOCUMENTS REVIEWED

- Application for Revised Fire Safety Certificate lodged by JGA on 3rd May 2016, with compliance report and drawings. The application included an appendix with a copy of the compliance report from the original fire safety certificate granted for the building (Ref. FSC1389/16).
- Revised information submitted by JGA to DCC, dated 22nd August 2016
- Appeal submission by JGA to An Bord Pleanála, dated 30th September 2016

- Submission by DCC to An Bord Pleanala, dated 26th October 2016
- Submission to An Bord Pleanala by JGA, dated 15th November 2016
- History file Ref. PL29S.245477 was also included with the appeal file but was not considered, as it relates to planning matters only.

2.0 FINDINGS

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

- The Gym area at upper basement level is being increased in area from 136.2sqm to 331.2sqm.
- The main issue is that the gym, which has substantially increased in size, is not provided with separate smoke ventilation but is instead proposed to be vented into the adjacent car park by way of an openable door.
- By reference to 5.4.3.1 of Technical Guidance Document B (TGDB), a basement in excess of 200sqm in area should be provided with smoke ventilation, and each compartment in such a basement should be ventilated separately.
- The applicants have stated in the compliance report that the basis for compliance (in respect of Part B5) will be the relevant recommendations from Section 5 of TGDB. However, in Section B5.5.1 of the report they refer to a provision in Clause 40 of BS5588: 11: 1997 which relates to ventilation of (basement) rooms not greater than 450sqm.
- While the recommendations of clause 40 (Facilities for the fire service) are generally more onerous than those in TGDB, the applicant has chosen the less onerous limit of 450sqm as it applies to ventilation of basements.
- The provision in relation to rooms up to 450sqm in area does not appear in BS9999: 2008 which supersedes BS5588: 11. The (equivalent) clause 20.3.2 of BS9999 says that if a basement is compartmented "*each compartment should have direct access to venting without having to open doors etc. into another compartment*".
- Due to the increased size of the gym area, adequate smoke ventilation would not be provided unless the area was separately ventilated.

The case made by the Appellant is summarised as follows:

- The area of the Gym is 331sqm. As the room is less than 450sqm in area, as per recommendations of BS5588: 11, smoke ventilation is not required.
- The basement venting strategy as set out in the previous granted Fire Safety Certificate (FSC1389/16) was designed under the guidance of BS5588: 11 for basements less than 450sqm (not required to be vented); the strategy in this case remains unchanged from the previously granted Fire Safety Certificate, as the enlarged gym at 331sqm is still less than 450sqm.
- Notwithstanding the absence of separate smoke venting from the gym, smoke can be vented via a doorway that connects to the adjoining car park, which is provided with mechanical smoke extract.
- The gym will be use ony intermittently by staff from the upper office floors, will have a relatively low fire load (gym equipment), with a relatively low risk of a fire occurring due to the usage of the area, the contents of the gym and being fully enclosed in fire resisting construction.
- The provision of the openable door to the car park should sufficiently vent any accumulated smoke from a small fire that might occur within the room.
- Providing ventilation to the gym is impracticable at this stage of the of the development, as the fire strategy was approved and granted by DCC with no requirements for separate ventilation provisions to the gym in the original approved Fire Safety Certificate (which made reference to the the BS5588: 11 recommendations relating to basement rooms of less than 450sqm not requiring separate ventilation.

3.0 CONSIDERATIONS:

The applicant places a certain emphasis and reliance on the fact that the previously granted Fire Safety Certificate stated that the strategy in relation to the (ventilation of) the basement was based on the recommendations of BS5588: 11, which provides for ventilation to all basement storeys, except that in a basement of less than 450sqm., a larger adjoining space can be utilised to vent into, if that larger space itself has means to vent the smoke.

Section B5.5.1 of the compliance report says that basement rooms less than 450sqm do not require their own ventilation arrangements; this is not entirely correct, as the recommendation says that ventilation may not need to be provided if vented to the adjoining space as set out above.

While this particular section of the report referenced BS5588: 11, the main heading at the beginning of Section B5 of the compliance report notes that the basis of compliance in relation to Part B5 generally was Section 5 of TGDB. This anomaly is highlighted by DCC in their appeal submission, when they note that Section B5 of TGDB has a limit of 200sqm for unventilated basements. According to the appellants, as the area of the original gym was less than both the 200sqm and 450sqm limits, it was within the parameters of the recommendations of both guidance documents (in not having separate ventilation).

However, there is another anomaly in that, on the face of it, the relevant area of the basement should be the overall area of 527sqm (original) or 722sqm (new layout). Under the recommendations of 5.4.3.1 of TGDB, where a basement is compartmented, each compartment should be ventilated separately.

TGDB has an overall basement area limit of 200sqm unventilated, whereas BS5588: 11 refers to a 450sqm room size limit (which may be ventilated into an adjoining space). Where permanent ventilation is not provided, TGDB recommends the alternative of mechanical ventilation, but accompanied by sprinklers (except in car parks). However, DCC have not required sprinklers in the gym space in this case.

In the original application, it is clear that DCC accepted that the overall basement of 527sqm could be ventilated from one compartment (391sqm car park with mechanical ventilation), with the remaining gym compartment of 136sqm being unventilated (but with a linking door), with the gym room seemingly deemed subject to the 200sqm limit in itself. The applicant also considers that this arrangement was accepted, but subject to the 450sqm limit as they stated.

DCC have noted that the provisions of BS9999, which supersedes BS5588: 11, effectively have the same recommendations as TGDB, and do not repeat the recommendations from the earlier BS5588: 11. The status of the guidance in the BS codes is unclear vis-a vis providing prima facie evidence of compliance with the requirements of Part B5 of the building regulations (they are referenced in TGDB mainly in relation to compliance with Regulation B1). However, where the guidance is referenced with respect to particular types of premises, then it would be reasonable to apply the guidance; in

this case, BS5588: 11 is specifically directed to office buildings, among others. On that basis, it is considered reasonable to take the guidance into consideration.

The commentary in Section 40.6 of BS5588: 11 sets out the objectives to be achieved in providing for the fire service to carry out their operations satisfactorily at basement level. These include facilities to release smoke from floor areas and, in the absence of windows, requires alternative smoke outlets. It notes that such smoke outlets are not required for means of escape purposes, but to facilitate the fire service in their operations. This is consistent with the functional requirements under regulation B5 which require that the building be provided with sufficient facilities to assist firefighters in their tasks, all to an extent dependent on the use and size of the building.

Under TGDB, a basement can have an area of up to 200sqm without the need for ventilation. There is no further restriction on the use of the space or on the contents in it (other than compartmentation, which is not an issue in this case). The total area could be occupied by flammable goods, with aisles and racks floor to ceiling such as an office filing room, presenting a very large and restricted-access fire load. A fire in such an area with such goods and layout would present a serious challenge to fire services, yet no ventilation of the room is required. An area of less than twice that size (e.g. the proposed gym room) furnished with gym equipment in an open plan space would be likely to present a significantly lower level of difficulty for fire service operations.

In terms of what the functional requirements of regulation B5 require, it is considered that the proposed size and use of the gym room represent, in this case, a lower level of risk to fire service operations when compared to a TGDB compliant basement room of 200sqm, which has no restriction on the quantity, type or disposition of the fire load contained within the room.

On the basis of the above, it is considered that the proposed layout and use of the gym room is acceptable in this case, that Condition 1 be amended as set out below and that an additional condition be added as set out below.

4.0 REASONS and CONSIDERATIONS:

Having regard to the submissions made in connection with the Revised Fire Safety Certificate application and the appeal, to the type of use and layout of the basement gym room and to the fact that a fire therein, in this case, is considered unlikely to present any greater hazard to firefighters than would a TGDB-compliant basement of up to 200sqm with uncontrolled fireload, and to the availability of a

mechanical smoke extract system in the adjoining compartment than can be utilised in the event of a fire in the gym, it is considered that the functional requirements of Part B5 of the Second Schedule of the Building Regulations 1997-2014 will be satisfied and that the appeal should be allowed, with Condition 1 replaced by the following conditions:

Condition:

The door between the gym and the car park to be an FD60S door, of minimum height 2.3m.

Reason:

To allow the door to be effectively used as a means of venting a smoke layer in the gym to the mechanically vented adjoining car park, as a means of assisting the fire service under Part B5 of the Second Schedule to the Building Regulations 1997 to 2014.

Condition:

The gym room as described to be restricted to gym use only , to be furnished only with standard gym equipment, to a layout as for normal gym use; any alteration from the above to be considered to be a material alteration requiring a further application for a Fire Safety Certificate under the building control regulations.

Reason:

The ensure the layout, restricted use and furnishing of the space will be maintained in the interests of ensuring adequate facilities for the fire service under Part B5 of the Second Schedule to the Building Regulations 1997 to 2014.

Signed by:

COLM TRAYNOR BE FIEI Chartered Engineer

Date: 16th December 2016