# Report

On

Appeal Against Conditions 1 and 4 Attached To Grant of Revised Fire Safety Certificate (Reg. Ref. FS 52/15)

Ву

**Galway County Council** 

For

Not to construct an extension to the Function Room at Upper Ground Floor level. Not to construct an external escape stair from 1<sup>st</sup> Floor level and that the 1<sup>st</sup> floor level remain vacant and to omit the requirement for a fire door at the dumbwaiter and for fire rated glazing below the balcony,

at

The Pavillion, The Glenlo Abbey Hotel, Kentfield, Busypark Co. Galway

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Client An Bord Pleanala Ref No GCC Reg Ref Our Ref. Date An Bord Pleanala FS 06D.FV0008 FS 120/14 16107-FS 06D.FV0008 -R01. 29<sup>th</sup> January 2016



## **1.0 Introduction**

This report sets out my findings and recommendations on the appeal submitted by Jeremy Gardner Associates Fire Engineering Consultants [hereafter referenced as JGA] on behalf of Baswal Ltd. against Conditions 1 and 4 attached to the Fire Safety Certificate (GCC Register Reference No. FS 52/15) granted by Galway County Council in respect of an application identified in the application form as:

"Not to construct an extension to the Function Room at Upper Ground Floor level. Not to construct an external escape stair from 1<sup>st</sup> Floor level and that the 1<sup>st</sup> floor level remain vacant and to omit the requirement for a fire door at the dumb- waiter and for fire rated glazing below the balcony,".

The application is a revised application to address conditions attached in the previously granted Fire Safety Certificate FS 120/14 granted by Galway County Council in respect of the following works:

"the extension of 39sqm to the bar/restaurant/function room on the first floor of the pavilion building"

### **1.1** Subject Matter of Appeal

An application for a Revised Fire Safety Certificate under Part IIIA of the Building Control Regulations 1997-2014 was made by JGA on behalf of Baswal Ltd. on 19.05.2015

The Revised Fire Safety Certificate was granted by Galway County Council on 26.06.2015 with 8 Conditions attached.

An appeal against Conditions 1 and 4 was lodged with An Bord Pleanala by JGA on 23<sup>rd</sup> July 2015.

The conditions under appeal read as follows:

### **Condition 1**

The windows adjacent to and underneath the two balcony escape routes serving the front of the building are to comply with diagram 8 of Technical Guidance Document B 2006 of the Building Regulations. They are to be 30min fire resisting and fixed shut within 1.8m of the external escape route.

#### Reason

In order to comply with B1 of the Building Regulations 2006.

### **Condition 4**

The Exits from the kitchen should open in the direction of escape.

#### Reason

In order to comply with B1 of the Building Regulations 2006.



## 1.2 Documents Reviewed

- Fire Safety Certificate Application and supporting documentation (FS 120/14): -
  - Completed application form for a Revised Fire Safety Certificate to Galway County Council dated 14.11.2014.
  - Fire Safety Certificate Application Documentation by JGA lodged in support of this application.
- The granted Revised Fire Safety Certificate with 8 attached conditions dated 22<sup>nd</sup> January 2015.
- Revised Fire Safety Certificate Application and supporting documentation (FS 52/15)
  - Completed application form for a Revised Fire Safety Certificate to Galway County Council dated 19.05.2015.
  - Fire Safety Certificate Application Documentation by JGA lodged in support of this application.
- The granted Revised Fire Safety Certificate with 8 attached conditions dated 26<sup>th</sup> June 2015.
- Appeal submissions to An Bord Pleanala:
  - o Submission dated 23.07.2015 and 24.08.2015 by JGA
  - Fire Officer Observations on the appeal submission not dated but post 23.07.2015 and preceding 24.08.2015.

Having regard to the nature of the Condition under appeal, it is considered that the appeal can be adjudicated upon without consideration of the entire of the application.



## 2.0 Technical Consideration

## 2.1 Case made by the Applicant/Appellant:

#### **Condition 1**

JGA are proposing to retain the existing windows on the north elevation at ground floor level where condition 1 requires these windows to be 30min fire resisting and fixed shut in accordance with Diagram 8 of Technical Guidance Document B.

The technical case made by JGA is based on the balcony being constructed of solid imperforate concrete. Which separates the external escape route from the ground floor elevation. They also note that the residential guidance does not require the elevation to be 30min fire resistant where escape in two directions is possible.

In addition JGA make the case that alternative means of escape are available should the balcony edge become compromised.

- One through the existing internal escape stair,
- The balcony is provided with two external escape stairs which are separated at ground floor level by a compartment line which would restrict the flow of smoke to one external stair at a time.

Following the response from the BCA the appellant makes the case that the external escape stairs are considered an alternative escape route from the first floor and have made reference to a number of behavioural studies and have liked the situation to escaping towards a void.

#### **Condition 4**

JGA make the case that Technical Guidance Document B only requires doors to open in the direction of escape is where the door is leading from a place of special fire risk or where the occupancy is greater than 20 persons in an assembly and recreation building.

The appellant makes the point that the occupancy for the room is 4 persons which is below the threshold for outward opening doors in Technical Guidance B.

They describe the Pavilion Kitchen as a place where food is kept warm and that no commercial cooking will take place therefore it is not considered a place of special fire risk.

Finally they make the case that the maximum travel distance of 9m in a single direction is allowed from places of special fire risk. So therefore even if the kitchen was considered a special fire risk only the exit from the kitchen into the adjacent stair enclosure would be required to satisfy travel distance requirement.



## 2.2 Case made by the BCA

### **Condition 1**

The fire officer's response citing the reasons for condition 1 are as follows:

The previous fire safety certificate application for the building (109/1993) permitted the use of an external escape stairs provided the windows below were fire rated where the use of external escae stairs is generally not acceptable in assembly and recreation buildings.

The fire officer dismisses the case made by the appellant that the situation is similar to the residential guidance given the differences in occupancy levels and compartmentation.

The response goes on to state that in his opinion should a plume flow over the edge of the balcony it would more likely pull the smoke over the edge of the balcony thus rendering it impassable.





The fire officer states that there is some half hour subdivision at ground floor and states that Diagram 8 from Technical Guidance Document B does not take into account compartmentation.

While Diagram 8 does refer to external escape stairs its requirements are designed for open unprotected external stairs and does not take into account where the stair is providing a fire and smoke resistance.

#### **Condition 4**

The fire officer's response citing the reasons for condition 4 are as follows:

The fire officer states that the kitchen is a place of special fire risk and Technical Guidance Document B: 2006 clearly states that all doors from places for special fire risk should open in the direction of escape: -

**1.4.3.3 Direction of opening -** Doors on escape routes should be hung so that they open in the direction of escape. In the case of small rooms or buildings, this may not be practical or indeed necessary, but in the following situations doors on escape routes must always be hung to open in the direction of escape:

- (a) from a place of special fire risk, or
- (b) In the case of premises comprising an industrial, storage or assembly and recreation use if more than 20 people are expected to use them, or
- (c) In the case of any other premises if more than 50 people are expected to use them.

The fire officer makes the point that the kitchen may be used for deep fat frying at some time in the future so it should be fully compliant with any requirements.



## 2.3 Consideration of the Issues arising

### Condition 1:

It is noted that even with the amount of compartmentation on ground floor there is still the capacity for smoke coming from any one of the ground floor compartments to travel along the bottom of the balcony and could compromise both escape stairs that occupants would have to approach

This would mean discounting both stairs together and in doing so stair no. 1 could no longer accommodate the entire capacity of this floor by itself.

The design allows for a single stair to be discounted therefore for the mean of escape to be compliant it has to be ensured that both external stairs are not simultaneously compromised.

To ensure that the two escape routes are always available from this area there are two options available: -

- a smoke channelling screen along the full width of the underside of the balcony in line with the wall separating the reception and reception/meeting room could be provided to channel smoke away from one of the escape routes ensuring two escape routes would remain available from 1<sup>st</sup> floor.
- Provide fire rated glazing as conditioned.

### Condition 2:

If the 'kitchen' is used solely for keeping food warm that has been already cooked then there is a case that it is not a high risk area. However this places an onus on the use of the room never being expanded upon. The management of the building will be by personal that will not know the subtle difference between high risk kitchen and low risk kitchens

Therefore given that the use of the room could easily change in the future and it would not be fair to assume that management would have the technical understanding of what would constitute a special fire risk and how to make the required changes to the kitchen should it its use change.

However that said there is no requirement for a high risk room to have multiple escape routes so long as the maximum single direction of travel does not exceed 9m. The fire officer's contention that it is preferable that there are two alternative means of escape may be true but it has no basis in the recommendations of TGD-B 2006.

Therefore the kitchen as shown only requires a single fire exit.



## 3.0 Recommendation

On the basis of the foregoing assessment, I recommend that An Bord Pleanala should direct the Building Control Authority to Grant the Fire Safety Certificate with Condition 1 and 4 amended as shown below: -

### **Condition 1**

The windows adjacent to and underneath the two balcony escape routes serving the front of the building are to comply with diagram 8 of Technical Guidance Document B 2006 of the Building Regulations. They are to be 30min fire resisting and fixed shut within 1.8m of the external escape route.

Or

A smoke channelling screen or equivalent should be provided along the full width of the underside of the balcony in line with the wall separating the reception and reception/meeting room. The construction and size of the channelling screen should be designed in accordance with BR368.

### Reason

In order to comply with B1 of the Building Regulations 2006.

### **Condition 4**

The exit from the first floor kitchen into the adjoining stair should be a designated fire exit.

#### Reason

In order to comply with B1 of the Building Regulations 2006.

#### **Des Fortune**

Director I Chartered Engineer I BSc(Eng) DipEng MSc (Fire Eng) CEng MIEI

Date: 28<sup>th</sup> January 2016