

**APARTMENT DEVELOPMENT,  
FARRENFERRIS,  
CORK.**

**FIRE STRATEGY REPORT.**

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## 1. DESCRIPTION OF DEVELOPMENT:

The development is to consist of 2 no. Apartment Blocks that are to be developed on the Farrenferris site.

The larger Block is to contain ground floor Apartments that are each provided with their own independent entrance from open-air.

The first contains a mixture of Apartments and Maisonettes.

These are accessed from an external balcony that has access to 3 no. escape stairways.

The smaller Block is contain ground floor Apartments that are each provided with their own independent entrance from open-air.

The first contains Apartments that are accessed from an external balcony that has access to 2 no. escape stairways.

Under the provisions of the Building Control Regulations, each building is subject to a separate Fire Safety Certificate.

The applications for the Fire Safety Certificates will be submitted to the Local Authority Fire Department and will be accompanied by fire safety compliance reports and fire safety compliance drawings.

The reports and drawings will demonstrate in detail how the buildings will be made to comply with Part B (Fire) of the Building Regulations.

The following documents will be used to demonstrate this compliance;

- i) BS 5588: Part 1: 1990: Fire Safety in the Design, Construction and Use of Residential Buildings – Code of Practice.
- ii) Technical Guidance Document B – Fire (2006) (Reprint 2020) to the Irish Building Regulations 2006 - 2019.
- iii) BRE Report 187 2014: External Fire Spread: Building Separation and Boundary Distances.

## **2. MEANS OF ESCAPE IN CASE OF FIRE:**

### **2.1 Layout of Apartments:**

- i) The internal layouts of each Apartment will be such that all habitable rooms are entered directly from an entrance hall.  
As the Apartments are located at ground and first floor levels only, it is not necessary to enclose these entrance halls in fire rated construction.
- ii) The maximum travel distance within an Apartment entrance hall will not exceed 9m. This is measured from the door of the most remote room, within the apartment, to the apartment entrance/exit door.
- iii) The exit door from each ground floor Apartment leads directly to open air and a route away from the building.
- iv) The exit door from each first floor Apartment leads to an open air balcony.  
There is escape in both directions from each balcony.  
The balconies provide direct access to escape stairways,

This layout ensures compliance with the principles set out under BS 5588: Part 1: 1990, as required.

### **2.2 Layout of Maisonettes:**

- i) The internal layouts of each Maisonette is such that all habitable rooms will be accessed from a protected escape stairway located within each Maisonette.  
These stairways will each be enclosed in 30 minute fire rated construction.
- ii) The exit door from each Maisonette leads to an open air balcony.  
There is escape in both directions along the balcony.  
The balcony provides direct access to escape stairways.

This layout ensures compliance with the principles set out under BS 5588: Part 1: 1990, as required.

### **2.3 Protection of Common Escape Routes:**

- i) It is not necessary to fire separate the open air balconies from the first floor Apartments/Maisonettes as there is escape in both directions in each case.
- ii) The internal common stairs is to be enclosed throughout its height in 60 minute fire rated construction.
- iii) The external stairways are to be fire separated from the buildings by 60 minute fire rated construction.

## 2.4 Active Fire Protection Systems Serving the Apartment Buildings:

The buildings are to be provided with a number of active fire protection systems as part of the fire safety strategy.

Full details of these will be set out in the compliance reports submitted with the applications for the Fire Safety Certificates.

The following is a summary in this regard;

- i) Each building will be provided with a comprehensive, common automatic fire detection and alarm system that is compliant with IS 3218: 2013 +A1: 2019. The system will provide Type L2/L3x automatic detection coverage.
  
- v) In addition to the provision of a common fire alarm system, each Apartment and Maisonette is to be provided with a domestic fire alarm system that is compliant with BS 5839: Part 6: 2019. The domestic systems will be Grade D type systems providing Type LD2 detection/alarm coverage.
  
- vi) Each building is to be provided with an emergency lighting system that provides coverage to all common circulation areas (Stairways and Balconies) and the areas outside final exits.  
The systems will be compliant with IS 3217: 2013 + A1: 2017.
  
- vii) All routes of escape will comply with the general fire protection features set out in Section 1.4 of Technical Guidance Document B.

### **3. INTERNAL FIRE SPREAD AND STRUCTURAL FIRE PROTECTION**

The provisions for ensuring that Parts B2 and B3 of the Building Regulations are being complied with for the Apartment building are set out in the following paragraphs.

These are in accordance with the specifications set out under Section B2 and Section B3 of Technical Guidance Document B.

- i) All internal wall and ceiling linings throughout each building will consist of plasterboard/fireline board and plastered masonry. These will achieve a Class 0 rating which ensures compliance with Regulation B2 of the Building Regulations.
- ii) All elements of structure (other than those which solely support the roof covering) will be fire rated to 60 minutes.
- iii) Each individual Apartment/Maisonette is to form a separate fire compartment. Each floor is to form a compartment floor and the walls between apartments are to form compartment walls. This ensures that each dwelling is enclosed in 60 minute fire rated construction.
- iv) All services that penetrate the designated fire barriers within the building will be fully firestopped in accordance with the specific criteria set out in Section 3.4 of Technical Guidance Document B.

### **4. EXTERNAL FIRE SPREAD:**

Regulation B4 of the Building Regulations is concerned with ensuring that external fire spread will not occur from this building to other buildings on the site or beyond the site boundaries.

The numbers and areas of windows and doors on the external walls of the building have been assessed to ensure they do not cause a risk of external fire spread beyond the site boundaries or from one residential building to another on the site.

The assessment has been carried out using the “Enclosing Rectangles” method set out in BRE Report 187: External Fire Spread: Building Separation and Boundary Distances.

Account has been taken of the extent of compartmentation proposed for the development and also the fireload associated with Residential usage.

The type of roof covering associated with the building will be chosen as necessary, to ensure it achieves at least an AC classification.

Rooflights will be of glazed construction.

## **5. ACCESS AND FACILITIES FOR THE FIRE SERVICE:**

Regulation B5 of the Building Regulations is concerned with ensuring that the development is provided with adequate access and facilities for the Fire Service in order to deal with a fire incident.

The following is being provided for in order to ensure compliance with Regulation B5 is being achieved;

### **5.1 External Fire Hydrants:**

The site will be served by at least 3 no. external fire hydrants. These are/will be located along Seminary Walk and at the entrance into the site.

These will be served directly from the Local Authority watermain.

### **5.2 Access for Fire Appliances:**

There is to be fire appliance access to the site available along Seminary Walk and at the main entrance to the site which is located between both blocks.

The buildings do not have a floor height in excess of 10m so pump type appliance access is adequate.

### **5.3 Personnel Access for Firefighting Purposes:**

Personnel access to the building for the Fire Service will be adequately provided for by a combination of the normal means of escape from the building and the provisions for fire appliance access.

