

DEADY GAHAN ARCHITECTS

Project title and address

OWN-DOOR ACCESS APARTMENTS/DUPLEXES

**PROPOSED RESIDENTIAL DEVELOPMENT AT
MAIN STREET,
BALLINCOLLIG,
CORK**

Report Title

DEMONSTRATION OF SCHEME COMPLIANCE WITH PART B (FIRE SAFETY) OF THE BUILDING REGULATIONS

Client

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Project Title:	Proposed residential development at Main Street, Ballincollig, Cork
Project No:	21070

Review History:					
Description (type):	Rev:	Date:	Originator:	Checked by:	Approved by:
Fire Safety Report	01	15/11/2024	LM	EJG	EJG

Issue History:					
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INTRODUCTION

This report relates to a design review undertaken in respect of Part B (Fire Safety) of the Building Regulations in relation to the proposed apartments within the residential development on Main Street, Ballincollig, Cork.

The proposed residential scheme is accessed via a public road known as Main Street/Carrigrohane Road, on a site close to the centre of Ballincollig.

The apartment element of the scheme is 2.5 storey construction containing 3no own-door access 2 bed apartments. At ground floor level there is one apartment, a bike store and a bin store. At first floor level there are 2no duplex/maisonette apartments

PURPOSE OF REPORT

The purpose of the report is to demonstrate compliance with the relevant sections of Part B: Fire Safety, Second Schedule to the Building Regulations of the proposed building.

The report is subdivided into sections each dealing with the specific requirements of Part B as follows:

- B1 Means of Escape in Case of Fire
- B2 Internal Fire Spread (Linings)
- B3 Internal Fire Spread (Structure)
- B4 External Fire Spread
- B5 Access and Facilities for the Fire Services

REGULATION B1 – MEANS OF ESCAPE

Apartments – Ground Floor Level

The means of escape from the ground floor apartment complies as follows:

- There are no habitable inner rooms.

Windows to habitable rooms within the apartments at ground floor level will comply with the following:

- Windows will have an unobstructed opening not less than 450mm x 450mm, with an unobstructed openable area of at least 0.33m².
- The bottom of the window opening will be not more than 1100mm above the floor in the room in which it is situated.

The ground floor apartments will be provided with an LD2 Grade D automatic fire detection and alarm system in accordance with I.S. 3218: 2013 + A1: 2019.

Duplexes/Maisonettes – First Floor Level

The means of escape from the duplexes/maisonettes complies as follows:

- There are no habitable inner rooms.

- An alternative exit is provided from all habitable rooms at second floor level. The alternative exits are via windows. The following will apply:
 - Windows will have an unobstructed opening not less than 450mm x 450mm, with an unobstructed openable area of at least 0.33m².
 - The bottom of the window opening will be not more than 1100mm above the floor in the room in which it is situated.
 - The ground beneath the window will be clear of obstructions and will be of a size and material suitable for supporting a ladder.
- In addition, the stairway enclosure within the duplexes/maisonette will be constructed as a protected stairway enclosure achieving 30 minutes fire resistance. All rooms opening off the stairway enclosure, other than bathrooms/toilets, will be fitted with a Fire Door of type FD30 standard (self-closers fitted). The stairway enclosure will be separated from the ground floor apartments by 60 minutes fire-resisting, compartment wall construction.
- The ground beneath the first floor balconies shall be clear of any obstructions and shall be of a size and material suitable for supporting a ladder.
- The duplexes/maisonettes will be provided with an LD2 Grade D automatic fire detection and alarm system in accordance with I.S. 3218: 2013 + A1: 2019.

Windows to habitable rooms at first floor level within the duplexes/maisonettes will comply with the following:

- Windows will have an unobstructed opening not less than 450mm x 450mm with an unobstructed openable area of 0.33m².
- The bottom of the window opening will be not more than 1100mm above the floor in the room in which it is situated.
- The ground beneath the window will be clear of obstructions and will be of a size and material suitable for supporting a ladder.

REGULATION B2 – INTERNAL FIRE SPREAD (LININGS)

The materials selected for the internal linings will comply with the relevant section of Technical Guidance Document B. Generally, the internal linings will be a plastered block or partition.

REGULATION B3 – INTERNAL FIRE SPREAD (STRUCTURE)

In accordance with Technical Guidance Document B a 60 minute fire resistance is required for the following elements of structure.

- Load bearing elements except for those which solely support the roof.
- External walls other than permitted unprotected areas.
- Compartment walls (all walls separating individual units and individual units from stairway enclosures).
- Compartment floors - all floor /ceiling combinations (except those within a duplex/maisonette).

A 30 minute fire resistance is to be achieved for the following:

- Protected stairway enclosure within duplexes/maisonettes.
- Floor/ceiling combination within duplexes/maisonettes.

REGULATION B4 – EXTERNAL FIRE SPREAD

The external walls and roof of the proposed building have been designed and will be constructed to provide adequate resistance to the spread of fire to and from neighbouring buildings in line with Technical Guidance Document B requirements.

REGULATION B5 – ACCESS AND FACILITIES FOR THE FIRE SERVICE

Vehicle access to the building is available via Main Street/Carrigrohane Road.