

ITCD for Cork City Council Social Housing Programme
2017-19-Lot 1A
Redemption Road

Compliance with Part B (Fire Safety)
of the Building Regulations

OVERVIEW

Daire Byrne & Associates, Fire Safety Consulting Engineers have been engaged as part of the Reddy Architecture Design Team in relation to the Social Housing Programme 2017-19 Lot 1A.

The proposed development site for Cork City Council Social Housing Programme 2017-19- Lot 1A at Redemption Road will provide for two different types of housing. These are:

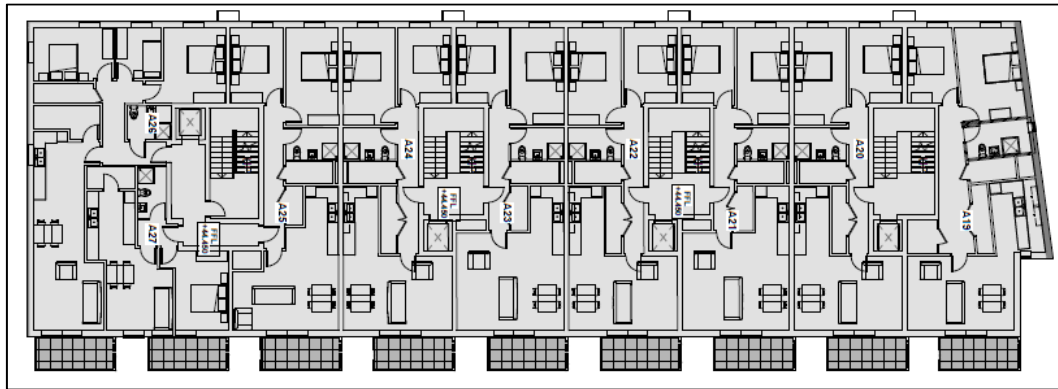
Type 1 – A four storey block of apartments

Type 2 – A four storey block of apartments for sheltered housing

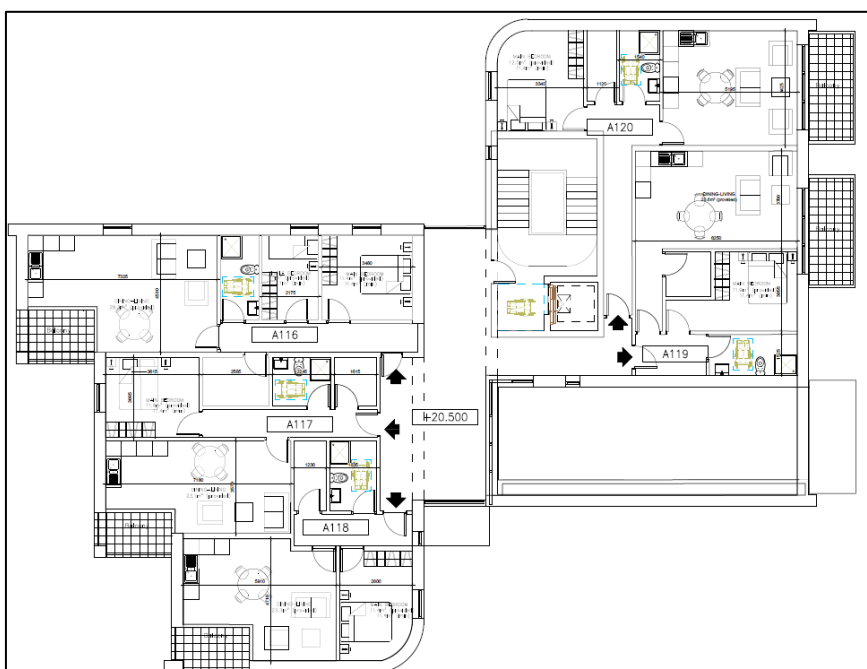
The fire strategy for both types of accommodation involves an assessment of each of the accommodation type which are standard apartments and sheltered housing units.

The approach for all dwelling types to ensure compliance with Part B of the Building Regulations is achieved is to address each of the functional requirements of the Building Regulations in respect of each unit type.

Typical Apartment Floor Layout – Type 1



Typical Sheltered Housing Floor Layout – Type 2



REGULATION B1 MEANS OF ESCAPE

The means of escape from the apartments, Type 1 will be assessed with reference to BS 5588 Part 1.

The means of escape from the apartments, Type 2 will be assessed with reference to BS 9991 : 2015 in respect of sheltered housing and BS 5588 Part 1.

REGULATION B2 INTERNAL FIRE SPREAD (LININGS)

The requirements in relation to internal fire spread (linings) will be assessed for compliance with reference to Technical Guidance Document B and Technical Guidance Document B.

REGULATION B3 INTERNAL FIRE SPREAD (STRUCTURE)

The requirements in relation to internal fire spread - structure are assessed for compliance with reference to Technical Guidance Document B.

Each individual residential unit will form a separate fire compartment and common means of escape are compartmented from the remainder of the building.

Where any non-traditional forms of construction are proposed accompanying certification project specific will be in place along with inspection regimes for the various stages of construction.

REGULATION B4 EXTERNAL FIRE SPREAD

The requirements in relation to external fire spread will be assessed for compliance with reference to BRE Report 187 : 2014.

The extent of the boundary conditions on site will ensure that there are no issues in relation to external fire spread.

REGULATION B5 ACCESS AND FACILITIES FOR THE FIRE SERVICE

The two types of fire brigade vehicle access for each of the accommodation types is outlined below along with the basis of compliance.

Type 1 – Four Storey Apartment Block

This block fronts onto Redemption Road / Lovers Walk which is a public roadway and also has vehicular access to the rear of the block.

Internally the building is sub-divided into four separate cores, direct access is available into each core from Redemption Road along the East elevation and via the parking area to the West elevation.

As this building is an apartment development the basis of compliance for fire fighting vehicle access is Section 5 of Technical Guidance Document B.

With reference to Table 5.1 of Technical Guidance Document B vehicle access is required to 15% of the building perimeter. In excess of this distance is provided to along the East and West Elevations.

Type 2 - Four Storey Block of Apartments for Sheltered Housing

This Block is accessed from Hattons Alley Lane which is a public roadway.

As this building is an apartment development the basis of compliance for fire fighting vehicle access is Section 5 of Technical Guidance Document B.

With reference to Table 5.1 of Technical Guidance Document B vehicle access is required to 15% of the building perimeter. In excess of this distance is provided to the South Elevation.

With specific reference to “Recommendations for Site Development Works for Housing Areas”:

Section 2 relates to the design of roadways and footpaths. This primarily relates to the structural design of roadways to include provisions relating to residential turning bays. Figure 2.2 provides details in relation to turning bays and hammer head facilities. These requirements have been incorporated in the roadway design on site in the specific areas, namely:

- (i) To the South East Elevation of Accommodation Type 1.
- (ii) To the South West Elevation of Accommodation Type 2.

Section 4 relates to water supply provisions, under Section 4.12 hydrants are required so that no house is more than 46m from a hydrant. This requirement is being complied with in relation to hydrants in the vicinity of the proposed development and will be addressed through Fire Safety Certificate applications in respect of accommodation Types 1 and 2.

The Code of Practice for Water Infrastructure as published by Uisce Éireann / Irish Water has also been referenced. The requirements are similar to the DoELG publication in respect of provision of fire hydrants. This document also references consultation with the Fire Department which will take place at Fire Safety Certificate Application stage.

The above demonstrates the provisions made in respect of fire fighting vehicle access complies with:

- Technical Guidance Document B.
- Recommendations for Site Development Works for Housing Areas as published by the DoELG.