

SLIGO COUNTY COUNCIL

The Nest, Quay Street,
Sligo, F91 K79P

Fire Safety Report

September / 2026

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Sligo County Council
Comhairle Chontae Shligigh

Sligo.



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1. FIRE SAFETY CERTIFICATE

1.1. PROJECT OUTLINE

A Fire Safety Certificate (FSC) application is being submitted as part of the proposed design and construction of the proposed building at Quay Street, Co. Sligo.

The proposed structure consists of approximately 222m² of floor area over 2 storeys. The 6 No. Compartments within the building will be accessible from the proposed doors at ground floor level which also serve as a designated exits from the proposed building.

The works relevant to this application have clearly been illustrated on the accompanying fire safety certificate drawings:

- 0690-MFA-XX-ZZ-DR-FSC-000_Site location Map
- 0690-MFA-XX-ZZ-DR-FSC-001_Site Layout Plan
- 0690-MFA-XX-ZZ-DR-FSC-100_Floor Plans
- 0690-MFA-XX-ZZ-DR-FSC-200_Elevations & Section

The extent of this application applies to the confines of the site boundary outlined in red on the site layout map and to the proposed building plans on the remaining fire safety certificate drawings.

1.2. FEE CALCULATION

The floor area relevant to this application is 222m² in total. The fee for this fire safety certificate application at a rate of €2.90 per m², is €643.80.

1.3. BASIS OF COMPLIANCE WITH REQUIREMENT OF THE BUILDING REGULATIONS

Table 1.1 Compliance with Building Regulations

Compartment	Code of Practice	Section
All Compartments	Technical Guidance Document B, 2024	B1, Means of Escape in case of Fire
		B2, Internal Fire Spread (Linings)
		B3, Internal Fire Spread (Structure)
		B4, External Fire Spread
		B5, Access & Facilities for the Fire Service

1. MEANS OF ESCAPE IN CASE OF FIRE

1.4. FIRE COMPARTMENTS

Several compartments have been identified for the works applicable to this application. The following table summarises the fire compartment information for each proposed compartment within the building:

Table 2.1 Fire Compartment Information							
Compartment No.	Description	Purpose Group	Risk Cat.	Area (m ²)	Limit on Area (m ²)	Volume (m ³)	Limit on Volume (m ³)
1.	Studio No. 1	5(a)	N/A	30	1,900	N/A	21,000
2	Recording Studio & Control Room	5(a)	N/A	17.32	1,900	N/A	21,000
3	Studio No. 2, Studio No. 3 & Community Room	5(a)	N/A	73.2	1,900	N/A	21,000
4	Male, Female & Dac Toilets	5(a)	N/A	16.2	1,900	N/A	21,000

1.5. BASIS OF COMPLIANCE WITH REQUIREMENT B1 OF THE FIRST SCHEDULE OF BUILDING REGULATIONS

Table 2.2 Compliance With Requirement B1		
Compartment Type.	Code of Practice	Comments
All	Technical Guidance Document B	Building Regulations 2024

1.6. MEANS OF ESCAPE PROVISIONS FOR DIFFERENT PURPOSE GROUPS AND BUILDING TYPES

Technical Guidance Document B section 1.1 outlines criteria requirements for Means of Escape for all purpose groups, with particular relevance to this fire certificate outlined in the following sub-sections:

- Sub-section 1.4: Design of Horizontal Escape
- Sub-section 1.5: Design of Vertical Escape
- Sub-section 1.9: General Provisions for Means of Escape

Where relevant, this fire certificate will reference the following:

- BS 9999-2017: Fire Safety in the Design Management and use of buildings – Code of Practice (Which supersedes BS 5588: Part 11: 1997)
- Sub-section 1.9: General Provisions for Means of Escape
- BS 9999-2017: Fire Safety in the Design Management and use of buildings – Code of Practice (Which supersedes BS 5588: Part 10: 1991)

1.6.1. Design of Horizontal Escape [1.4 of TGD-B 2024]

This sub-section deals with the provision of means of escape from any point to the storey exit of the floor in question. The number of escape routes and exits to be provided from a room or storey depends on the following factors:

- Number of occupants
- Limitations on travel distance
- Minimum number of escape routes required

1.6.1.1. Number of Occupants [1.4.2.1 of TGD-B 2024]

The number of occupants likely to use a room or storey is determined by the occupant capacity calculation. The occupancy load factors are based on the recommendations of Table 1.1 of TGD-B. The number of occupants in a room or storey will determine the width of escape routes and the number of escapes to be provided.

A summary of the proposed design occupancy figures is outlined below based on the following load factors:

	Description	Area (m ²)	Load Factor	Total Design Occupancy
Studio No.1	Ground Floor	30	1.4	22
Recording Studio	Ground Floor	14.8	1.4	11
Control Room	Ground Floor	6.4	1.4	5
Studio No. 2	First Floor	15.5	1.4	11
Studio No. 3	First Floor	14.2	1.4	11
Community Room	First Floor	34	1	34

1.6.1.2. Travel Distance [1.4.2.2 of TGD-B 2024]

Travel distances for this Fire Safety Certificate are provided in accordance with 1.2.2.2 and Table 1.2 of TGD-B 2024 for all compartments, as outlined in Table 2.4 contained in this report.

1.6.1.3. Minimum Number of escape Routes [1.4.2.4 of TGD-B 2024]

The proposed building complies with TGD-B where Table 4 indicates a minimum number of 2 escape routes from all storeys for occupancies of between 1 – 500 (per compartment). where a single route can be acceptable.

d) in the case of all other Purpose Groups, areas, rooms or a storey not likely to contain more than 60 persons provided that the limits on travel in one direction only are satisfied (see Table 3).

In compartment 3 there is 1 escape route that complies with the maximum travel distances, the compartments will not likely contain more than 60 persons. Therefore, the minimum number of escape routes provided is satisfactory.

1.6.2. Design of Vertical Escape [1.5 of TGD-B 2024]

This section deals with the provision of a sufficient number of adequately sized and protected escape stairways, as well as the measures necessary to protect escape stairways.

1.6.2.1. Number of Escape Stairways [1.5.2 of TGD-B 2024]

The minimum numbers of escape routes proposed are provided in accordance with section 1.5.3 of TGD-B by virtue of the height and use of the building as outlined in section 1.5.5 of TGD-B.

1.6.2.2. Single Escape Stairways [1.5.3 of TGD-B 2024]

The proposed building complies with TGD-B in situations where a building (or part of a building) may be served by a single escape stairway as follows:

(d) in the case of all other purpose groups, where there is no storey more than 11m above ground level, and where (in accordance with par. 1.2.2.5)

In compartments 3 the above criteria is met.

1.6.2.3. Width of Escape Stairways [1.5.4 of TGD-B 2024]

All proposed stairways meet the criteria of Table 7 Para 1.5.4 TGD-B where in an assemble and recreation building (purpose group 5), serving an area which can accommodate less than 100 people, a minimum width of 900mm is required for a maximum number of 100 persons.

1.6.2.4. Protection of Escape Stairways [1.5.6 of TGD-B 2024]

The stair serves a small occupancy, with the topflight not more than 11m above ground level and travel distances within the limits set out in TGD-B.

1.6.2.5. Basement Stairways [1.5.7 of TGD-B 2024]

Not relevant in this application.

1.6.2.6. Protected Lobbies and Corridors to Escape Stairways [1.5.8 of TGD-B 2024]

Not relevant in this application.

1.6.2.7. External Escape Stairways [1.5.9 of TGD-B 2024]

Not relevant in this application.

1.6.3. General Provisions for Means of Escape [1.9 of TGD-B 2024]

This section deals with a number of provisions about the construction and protection of escape routes, some service installations, and other matters associated with the design of escape routes.

1.6.3.1. Protection of Escape Routes [1.9.2 of TGD-B 2024]

- The proposed fire resistance of enclosures is in accordance with Tables 31 and 32 of Appendix A of Technical Guidance Document B.
- Fire resistance of doors is in accordance with table 36 of Appendix B of Technical Guidance Document B. This satisfies the requirements for doors within a separating wall as per Table B1.

1.6.3.2. Doors on Escape Routes [1.9.3 of TGD-B 2024]

Doors on escape routes are provided in accordance with 1.9.3 of TGD-B. The doors are to be fitted with simple fastenings that can be readily operated in the direction of escape without the use of a key, and without people requiring to manipulate more than one mechanism. In compliance with 1.9.3.1, doors on escape routes are to hang in the direction of escape. Door mechanisms are to be in compliance with EN 1125 and EN 179 as applicable.

Exit doors open to a minimum angle of 90° and comply with section 1.9.3.4 of TGD-B.

1.6.3.3. Construction of Escape Stairways [1.9.4 of TGD-B 2024]

Proposed stairways are to be constructed in accordance with 1.9.4 of TGD-B.

1.6.3.4. Height of Escape Routes [1.9.5 of TGD-B 2024]

All escape routes will have a minimum clear headroom of 2m in accordance with 1.9.5 of TGD Part B.

1.6.3.5. Floors of Escape Routes [1.9.6 of TGD-B 2024]

Floors of all escape routes (including steps and landings) are to have non-slippery even surfaces and are provided in accordance with 1.9.6 of TGD-B.

1.6.3.6. Final Exits [1.9.7 of TGD-B 2024]

Final exits are proposed in accordance with 1.9.7 of TGD-B. The proposed exits will facilitate the rapid dispersal of persons from the vicinity of the building. The proposed exits will disperse persons evacuating the building where they can disperse in two directions.

1.6.3.7. Lighting of Escape Routes [1.9.8 of TGD-B 2024]

The safe movement of persons along escape routes, towards and through the exits to a place of safety, depends on the illumination of those routes.

As per Table 11 of TGD-B, for purpose group (5) Assembly and Recreation, emergency escape lighting is required for “defined and undefined escape routes (except in accommodation open on one side, with naturally lit escape routes, to view sport or entertainment during normal daylight hours: and except toilet accommodation having a floor area of not more than 8m². Emergency lighting will be provided to escape routes.

1.6.3.8. Lifts [1.9.9 of TGD-B 2024]

2.3.3.9 Fire Protection of Lifts [1.9.9.2 of TGD-B 2024]

Not Applicable.

1.9.9.3 Provision of Lobbies to Lifts [1.9.9.3 of TGD-B 2024]

Not Applicable

1.9.9.3 Lifts in Buildings > 20m [1.9.9.4. of TGD-B 2024]

Not Applicable.

1.9.9.3 Lifts Serving Basements [1.9.9.5. of TGD-B 2024]

Not Applicable.

1.9.9.3 Lift Machine Rooms [1.9.9.6. of TGD-B 2024]

Not applicable.

1.9.9.3 Feature Lifts [1.9.9.7 of TGD-B 2024]

Not applicable

1.9.9.3 Evacuation Lifts [1.9.9.8 of TGD-B 2024]

Not Applicable.

1.9.9.3 Requirements For Evacuation Lifts [1.9.9.8.1 of TGD-B 2024]

Not applicable.

1.6.3.9. Electrical installation [1.9.10 of TGD-B 2024]

All electrical installations are to be installed in accordance with the *National Rules for Electrical Installations (ET 101)* published by the Electro-Technical Council of Ireland, NSAI's I.S.10101 and all supplementary requirements from relevant standards.

1.6.3.10. Refuse Chutes and Storage [1.9.11 of TGD-B 2024]

Not relevant in this application.

1.6.3.11. Fire Safety Signs [1.9.12 of TGD-B 2024]

Signs to indicate escape routes, including any doorways or exits which provide access to the means of escape, are required. They are to be illuminated by natural light / artificial light, or by emergency escape lighting as per section 2.3.3.7 above.

Signs indicating positions of fire-fighting equipment and fire alarm call points are to be provided.

Signs in accordance with Annex A, A19 of I.S. EN 1125 are to be provided of fire doors, except those held open by electromagnetic devices connected to the fire alarm.

1.6.3.12. Fire Detection and Alarm Systems [1.9.13 of TGD-B 2024]

A type L2/L3 fire detection and alarm system is to be installed in “Defined escape routes, areas off defined escape routes, places of special fire risk” as per the requirements of table 12 of TGD Part B. System to be installed in accordance with IS 3218:2024 Fire detection and alarm systems for buildings - System design, installation, commissioning, servicing and maintenance & Amendment 1:2019 and in accordance with recommendations of the Irish Standard.

1.6.3.13. Provision of Refuge Areas in Buildings [1.9.14 of TGD-B 2024]

As per the requirements of section 1.9.14.1 of TGD-B, a refuge area will be provided within the enclosure to a protected stairway. Please see attached drawing **0690-MFA-XX-XX-DR-FSC-100**

1.6.3.14. First-Aid Fire-Fighting Equipment [1.9.15 of TGD-B 2024]

As per the requirements of section 1.9.15 of TGD-B, hose-reels conforming to I.S. EN 671-1 should be provided in a building where the floor area exceeds 500m². as the floor area does not exceed 500m², it is not being provided.

Table 2.4 Fire Escape Information

Areas	Compt. Area (m ²)	Purpose Group	Maximum No. of Occupants	No. of Escape Routes reqd.	No. of Escape Routes proposed	Min. width of escape Routes reqd. mm	Min Exit width provided mm	Maximum Allowable Travel/Direct Distances		Actual Travel/Direct Distance	
								One Dir (m)	>One Dir (m)	One Dir (m)	>One Dir (m)
1 Studio 1	30	5(a)	22	2	2	800	800	12	N/A	8.2	N/A
2 Recording Studio	14.8	5(a)	11	2	2	800	800	12	N/A	11.4	N/A
3 Control Room	6.4	5(a)	5	2	2	800	800	12	N/A	7.7	N/A
4 Studio 2	15.5	5(a)	11	1	1	800	800	12	N/A	11.9	N/A
5 Studio 3	14.2	5(a)	11	1	1	800	800	12	N/A	9	N/A
6 Community Room	34	5(a)	34	1	1	800	800	12	N/A	10.4	N/A

2. INTERNAL FIRE SPREAD (LININGS)

2.1. BASIS OF COMPLIANCE

The basis of compliance with the requirements of Section 2 of the First Schedule of the Building Regulations is accordance with Section 2.0-2.3 of Technical Guidance Document B.

2.2. GENERAL PROVISIONS [2.1 OF TGD-B 2024]

The limiting of fire spread on surfaces also contributes to achieving adequate means of escape, outlined in Section 1 (Means of Warning and Escape in Case of Fire); limited fire spread in unseen spaces, outlined in Section 3 (Internal Fire Spread (Structure)); and adequate protection for firefighting, outlined in Section 5 (Access and Facilities for the Fire Services).

2.2.1. Fire Spread and Lining Materials

Surface linings on the walls and ceilings are to comply with the requirements of Section 2.1 and 2.2 of TGD-B and meet with the performance classifications as listed in Appendix A.

The surface linings of the walls and ceilings of the building meet the following performance classifications (as defined in Appendix A of Technical Guidance Document B):

Table 3.1 Surface linings of the walls and ceilings				
Location	Room	Classification to I.S. EN 13501-1	Lining Material	
			Walls	Ceilings
All Compartments	Studio No. 1	Class B -s3, d2	Plastered Masonry / timber/metal stud with plasterboard	Plasterboard
	Community Room	Class B -s3, d2	Plastered Masonry / timber/metal stud with plasterboard	Plasterboard
	Toilets	Class D -s3, d2	Plastered Masonry / timber/metal stud with plasterboard	Plasterboard
	All Other	Class C -s3, d2	Plastered Masonry / timber/metal stud with plasterboard / tiles	Plasterboard

2.3. VARIATIONS AND SPECIAL PROVISIONS [2.2 OF TGD-B 2024]

2.3.1. Walls [2.2.1 of TGD-B 2006]

The surfaces of walls will comply with section 2.2 of TGD-B, as indicated in Table 3.1 of this report (above).

2.3.2. Fire Protected Suspended Ceilings [2.2.2.2 of TGD-B 2024]

Not applicable in this application. Compartment and enclosure walls will be constructed to underside of roof.

2.3.3. Special Applications [2.2.2.3 of TGD-B 2024]

Not applicable to this application.

2.4. THERMOPLASTIC MATERIALS [2.3 OF TGD-B 2024]

Any thermoplastic windows or lighting diffusers, if provided, will achieve a TP(a) or TP(b) classification. In the event that they do not achieve the above ratings then their usage will be confined to those areas specified in Section 2.3 of TGD B, i.e. thermoplastic lights or diffusers will be in accordance with Section 2.3 and table 14 of TGD B.

3. INTERNAL FIRE SPREAD (STRUCTURE)

3.1. BASIS OF COMPLIANCE

The basis of compliance with requirements B3 of the Second Schedule of the Building Regulations is accordance with Section B3 of Technical Guidance Document B. Columns and bracing to be painted with intumescent paint that support floors and walls.

ELEMENTS OF STRUCTURE

Compliance with fire resistance standard is outlined in Appendix A – Tables 31 and 32 of TGD-Part B. The following Tables outline the resistance adopted for each element of the building showing compliance with Section 3.1.3 of TGD-Part B in relation to the requirements outlined in Tables 31 and 32 of TGD-Part B.

Table 4.1 Elements of Structure					
Element of Structure	Type of Construction	Fire Resistance Provided			Method of Exposure
		Load bearing Capacity (min.)	Integrity (min.)	Insulation (min.)	
Structural Frame	Masonry	60	No Provision	No Provision	Exposed faces
Floor slab	Precast Concrete	60	60	60	From Underside
External Walls	Masonry	60	60	30	From inside
Separating Walls	Masonry	60	60	60	Each side separately

Notes:

- When tested to BS476: Part 21 for load bearing elements, Part 22 for non-load bearing elements, Part 23 for fire protecting suspended ceilings and Part 24 for ventilation ducts. (Tests to BS476: Part 8, are permitted subject to Appendix A.5 of Technical Guidance Document B).

(B) The following table outlines the schedule of minimum periods of fire resistance required for elements of structure in accordance with Table 32 of Appendix A in Technical Guidance Document B.

Table 4.2 Minimum Period of Fire Resistance		
Compt. No. / Name	Purpose Group	Minimum period of fire resistance required for elements of structure (mins) (Height to top storey not more than 5m)
1 Studio 1	5(a)	60 mins
2 Recording Studio	5(a)	60 mins
3 Control Room	5(a)	60 mins
4 Studio 2	5(a)	60 mins
5 Studio 3	5(a)	60 mins
6 Community Room	5(a)	60 mins

(C) The building is not sprinklered

3.2. FIRE DOORS

Table 4.3 Fire Doors			
Fire Door No.	Location of Fire Door	Typical Glazing Provided	Minimum Resistance in Terms of Integrity (mins)
FD 60S	Compartment Walls	60mins fire resistant glazing (where applicable)	60
E30 Sa	Protected Stairs	60mins fire resistant glazing (where applicable)	30

Notes:

1. When tested to BS476: Part 22 1987 (or BS 476: part 8 subject to paragraph A5 of appendix A in the TGD-B)
2. Doors required to resist the passage of smoke at ambient temperatures conditions should be indicated with the suffix S, i.e. these doors should have leakage rate not exceeding 3m³/m/hour (head and Jam only) when tested at 25.p.a under section 31.1
3. A fire door set includes the doorframe, door leaf associated ironmongery.
4. All fire doors should be identified by a fixed small metal plate indicating the period of resistance a, manufacture, year of manufacture and other pertinent details.
5. Each fire door is shown on the fire safety drawings

3.3. COMPARTMENTATION [3.4 OF TGD-B 2024]

3.3.1. *Provision of Compartment Walls and Compartment Floors [3.4.4 of TGD 2024]*

Compartment walls and floors are proposed at all locations outlined in Section 3.4.4.1, and 3.4.4.6. These locations include separating walls at all floors other than the ground floor. No limits outlined in table 15 of TGD B for compartment size.

3.3.2. *All purpose groups [3.4.4.1 of TGD 2024]*

Compartment walls and floors are proposed at every floor and separating wall thus satisfying the requirements of Section 3.4.4.1 of TGD-Part B.

3.3.3. *Non-residential buildings [3.4.4.5 of TGD 2024]*

Compartment walls and floors are proposed at every floor and separating wall thus satisfying the requirements of Section 3.2.4.1 of TGD-Part B.

3.3.4. *Construction of Compartment Floors and Compartment Walls [3.5 of TGD-B 2024]*

Every compartment floor and compartment wall will:

- a) Form a complete barrier to fire between the compartments they separate
- b) Have the appropriate fire resistance as indicated in Appendix A, Tables 31 and 32
- c) Be constructed in accordance with the relevant guidance in subsections 3.5.2 to 3.5.16 where appropriate.

3.3.5. *Accommodation of Services in Compartment Walls/Floor and Separating Walls [3.5.7. of TGD 2024]*

Where services breach compartment walls/floors, they will be contained in fire resistant ducts and will be adequately protected, and fire stopped to meet the requirements of Section 3.5.1 of TGD-Part B.

3.3.6. *Junction of Compartment Wall and Roof [3.5.13 of TGD 2024]*

Compartment walls will be taken to the underside of roof level between units and fire stopped where necessary meeting the requirements of Section 3.5.13 of TGD-Part B.

3.3.7. *Openings between Compartments [3.5.15 of TGD 2024]*

All door openings in compartment walls are to be protected by means of fire door as per Appendix B and Table 36 of TGD-B.

3.4. CONCEALED SPACES [3.6 OF TGD-B 2024]

3.4.1. *Provision of Cavity Barriers [3.3.2 of TGD-B 2024]*

Cavity barriers will be provided in the locations outlined in Section 3.6.2 and Table 16 of TGD-B for Purpose Group 3-8 buildings. Cavity barriers are to be provided:

- At the top of an external cavity wall and at the junction of any such wall with a separating wall.
- At the junction between an external cavity wall, and every compartment floor and compartment wall.
- At the junction between an internal cavity wall and every compartment floor, compartment wall, or other wall or door assembly which forms a fire-resistant barrier.
- At the junction between an internal cavity compartment wall or cavity compartment floor and any other internal cavity compartment wall or cavity compartment floor.
- In a protected escape route, above or below any fire-resisting construction which is not carried full storey height, or (in the case of a top storey) to the underside of the roof covering.
- Where a corridor (which is not a protected corridor) should be sub-divided to prevent fire or smoke from affecting the routes to two exists simultaneously, above any corridor enclosures which are not carried full storey height, or (in the case of a top storey) to underside of roof covering.
- To subdivide any cavity (including any roof space) void so that the distance between cavity barriers does not exceed the dimensions given in Table 3.3 of TGD-B.

3.4.2. *Maximum Dimensions of Concealed Spaces [3.6.3 of TGD-B 2024]*

Maximum dimensions of cavities to comply with table 17 of TGD-B 2024. Specifically maximum undivided concealed space to be limited to less than 20m in any direction for Class C-s3, d2 or better surface linings on walls, and 10m in any direction for lower class surface linings.

3.4.3. *Construction and Fixings for Cavity Barriers [3.6.4 of TGD-B 2024]*

Cavity barriers shall be provided to ensure 30 minutes fire resistance. Cavity barriers will be tightly fitted to rigid construction where applicable and shall be fixed and positioned to ensure movement, shrinkage and failure of the cavity barrier does not occur as outlined in Section 3.6.4 of TGD-Part B.

3.4.4. *Opening in Cavity Barriers [3.6.5 of TGD-B 2024]*

Openings in cavity barriers will only be provided where required under the conditions outlined in Section 3.6.5 of TGD-Part B.

- a) Doors which have at least 30 mins fire resistance and are fitted in accordance with the provisions of Appendix B of TGD-B
- b) The passage of pipes which meet the provisions in sub-section 3.7 of TGD-B
- c) The passage of cables or conduits containing one or more cables
- d) Openings fitted with a suitably mounted automatic fire shutter
- e) Ducts which (unless they are fire resisting) are fitted with a suitably mounted automatic fire shutter where they pass through the cavity barrier

3.5. PROTECTION OF OPENINGS [3.7 OF TGD-B 2024]

3.5.1. *Openings for Pipes [3.7.2 of TGD-B 2024]*

As in accordance with TGD-Part B Section 3.7.2, any pipes passing through compartment walls will be provided with proprietary seals. Where proprietary seals are not provided around pipes, the openings will be kept as minimal as possible and will conform to the requirements of Table 18 of TGD-Part B.

3.5.2. Ventilation Ducts [3.7.3 of TGD-B 2024]

Ventilation and air conditioning ducts which pass from one compartment to another should be protected in accordance with the recommendations contained in I.S. EN 15423.

3.5.3. Fire Stopping [3.7.5 of TGD-B 2024]

Fire stopping will be provided in accordance with 3.7.5 of TGD-B. Fire collars are to be fitted to soil vent, discharge and waste pipes in excess of 40mm penetrating compartment walls, floors and protected enclosures.

Fire stopping and openings for pipes will comply with the requirements of Section 3.7 of TGD-B. Fire stopping will be provided around all service ducts and pipes penetrating compartment walls and floors. Fire stopping and sealing is to be carried out using mortar, rockwool fire insulation and proprietary sealing systems.

4. EXTERNAL FIRE SPREAD

4.1. BASIS OF COMPLIANCE

The basis of compliance with requirement B4 of the Second Schedule to the Building Regulations is compliance with Section 4.0-4.3 of Technical Guidance Document B.

4.2. CONSTRUCTION OF EXTERNAL WALLS [4.1 OF TGD-B 2024]

4.2.1. Fire Resistance [4.3.1 of TGD-B 2024]

The external walls of the building will be constructed to have a fire resistance of REI 60 satisfying the requirements in Appendix A, Table 31 of TGD-B.

4.2.2. Portal Frames [4.3.5 of TGD-B 2024]

Not Applicable.

4.2.3. Restriction of Fire Spread on External Wall [4.3.3 of TGD-B 2024]

The external surfaces of the walls will be compliant with 4.3.3 and Table 19 of TGD-B. The external walls will be finished masonry. Surfaces will have a minimum classification of Class C – s3, d2 and comply with Sections 4.3.3 of TGD-B.

Table 5.1 External Surface

External Wall	Type of Construction	Surface spread of flame rating on external face of wall
All Elevations	Masonry	Class C – s3, d2

4.3. SPACE SEPERATION [4.4 OF TGD-B 2024]

4.3.1. Notional & Relevant Boundaries [4.4.2 & 4.4.2.1 of TGD-B 2024]

The notional and relevant boundaries for the building relative to this fire certificate application are outlined on the accompanying drawings, and comply with table 15 in TGD B.

4.3.2. Unprotected Areas and Fire Resistance [4.4.3 of TGD-B 2024]

Unprotected areas have been identified in accordance with Section 4.4.3 of TGD-Part B and are outlined in the associated drawings with this application.

4.3.3. Outermost Wall Elements Contributing to Unprotected Areas [4.4.3.1 of TGD-B 2024]

No combustible materials are proposed for the surfacing of external walls.

4.3.4. External Walls Within 1m of the Relevant Boundary [4.4.5 of TGD-B 2024]

No walls are within 1m of the relevant boundaries of the building.

4.3.5. External Walls 1m or more from the Relevant Boundary [4.4.6 of TGD-B 2024]

The external walls will meet the requirements of Section 4.4.6 of TGD-B. The extent of the unprotected areas in the external wall of the permitted elevation, the distance from the relevant boundary and the calculation method (Enclosing Rectangle Method) used in each instance are detailed in the table below.

Table 5.2 illustrates the unprotected areas and distances to the relevant boundary. which has the maximum unprotected areas. Elevations and unprotected areas are shown in the drawings accompanying this application.

Table 5.2 Unprotected Areas (Maximum)					
Elevation	Unprotected Area (m ²)	Enclosed Rectangle m ²	Unprotected Area Provided (%)	Minimum Required Distance to Relevant boundary (m)	Actual Distance to Relevant Boundary (m)
Section A-A	14.1	6m x 9m 54m ²	26	3.5(2)	4.7
Section B-B	6.15	6m x 6m 36m ²	17	2(1)	8.7
Section C-C	5	6m x 3m 18m ²	27.7	2(1)	4.7

4.4. ROOF COVERINGS [4.5 OF TGD-B 2024]

The basis of compliance of the roof covering material in accordance with Section 4.5 of TGD-B. Roof coverings will be provided in accordance with section 4.5 of TGD Part B.

4.4.1. Other Controls on Roofs [4.5.2 of TGD-B 2024]

The requirements of Section 4.5.2 of TGD-Part B are satisfied through Section 3 of TGD-Part B outlined in this report.

4.4.2. Separation Distances [4.5.4 of TGD-B 2024]

The proposed roof will consist of corrugated sheeting. The roof will therefore conform with Section 4.5.4 and Table 22 of TGD Part B.

4.4.3. Plastic Roof Lights [4.5.5 of TGD-B 2024]

If plastic roof lights are provided, they will conform to section 4.5.5 of TGD-B 2024 and achieve a Class C-s3, d2 which can be regarded as having Broof(t4).

4.4.4. Glass in Roof Lights [4.5.6 of TGD-B 2024]

If glass in roof lights is provided, they will conform to section 4.5.6 of TGD-B 2024 and achieve Broof(t4).

5. ACCESS AND FACILITIES FOR THE FIRE BRIGADE

5.1. BASIS OF COMPLIANCE

The basis of compliance with requirements B5 of the Second Schedule to the Building Regulations is accordance with Section 5.0-5.4 of Technical Guidance Document B.

5.2. PROVISION OF INTERNAL FIRE MAINS [5.3.2 OF TGD-B 2024]

Not relevant in this application.

5.3. BUILDINGS WITHOUT AN INTERNAL FIRE MAIN [5.3.3.2.1 OF TGD-B 2024]

Water for firefighting is available by way of a number of possible sources as follows;

- (a) Water carried on fire appliances (water tenders, water tankers, etc)
- (b) Hydrants on external fire mains
- (c) Static storage tanks or reservoirs where provided
- (d) Other sources such as rivers, canals, ponds, etc., where adequate access for pumping is available.

The sources of water applicable to this fire cert are by way of water carried by fire appliances (as mentioned in (a) above).

5.4. EXTERNAL FIRE MAINS [5.3.3.1 OF TGD-B 2024]

Not being provided.

5.5. VEHICLE ACCESS [5.4 OF TGD-B 2024]

(a) Vehicle Access to Buildings

Table 6.1 Vehicle Access to Building			
Volume of Building (approx.) (m ³)	Height of Top Storey Above Ground (m)	Provide Vehicle Access	Type of Appliance
Under 7,000 (approx. volume of building = 720)	Under 11 (Approx height of top storey above ground = 2.7))	2.4m for every 90m ² of Ground Floor Area (Approx vehicle access to 10m)	Pump

Notes:

1 Calculation Method used Table 24 of TGD Part B.

As per Table 6.1 above, the vehicle access required is 2.4m for every 90m² of the ground floor area, as the building has a ground floor area of 144m² we can use interpolation to find that 3.8m is required. Access to the side elevation is provided equating to approximately 10m. This satisfies the requirements of Table 24 of TGD-B.

(b) Vehicle Access route specification

Table 6.2 Vehicle Route specification					
Min. width of road between kerbs (m)	Min. width of gateways between kerbs (m)	Min. turning circle between curbs (m)	Min. turning circle between walls (m)	Min. clearance height (m)	Min. carrying capacity (tonnes)
3.7	3.1	16.8	19.2	3.7	12.5

The above noted requirements are provided to the building within the road network serving the development.

5.6. PERSONNEL ACCESS TO BUILDINGS FOR FIREFIGHTING [5.5 OF TGD-B 2024]

Access requirements for fire-fighting personnel is achieved by a combination of normal means of escape and the measures for vehicle access outlined in section 6.5 above.

5.7. AREAS REQUIRING SPECIAL CONSIDERATIONS [5.6 OF TGD-B 2024]

5.7.1. Boiler Rooms & Fuel Stores [5.6.1 of TGD-B 2024]

Not relevant to this application.

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