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FIRE SAFETY CERTIFICATE APPLICATION

FOR

**Subdivision of non residential care centre into care
centre with reduced floor area + residential unit
at Milltown, Co. Galway.**

COMPLIANCE REPORT

Client: Milltown Housing Association.

Date: 27-06-25

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INTRODUCTION

This report is completed in support of a Fire Safety Certificate application under Part III of the Building Control Regulations 1997 (+ relevant amendments).

In this report it is demonstrated that the development, if constructed in accordance with drawings and design details submitted with the application together with performance requirements prescribed in this report, will comply with the requirements of Part B (Fire safety) of the second schedule to the Building Regulations 1997 (as amended). It is noted that the objective of the fire safety measures set out in this report is to satisfy the obligations of the Building Regulations, which are concerned with the health, safety and welfare of persons in and about the subject development. Additional measures may be necessary to protect against the risk to property and consequential loss; such measures are however a matter for the client and his insurers.

LOCATION: Milltown, Co. Galway.

SCOPE OF WORKS:

Subdivision of existing non residential care centre into care centre with reduced floor area (84m²) and residential unit (60m²) - PG 1a.

The centre is operated by the local community for the benefit of local senior residents, some of whom reside in community association dwellings in the immediate vicinity of the unit.

External walls are of blockwork construction.

The separating wall is of blockwork with necessary fire resistance rating.

Internal partitions are of block/ stud work with required level of fire resistance.

Note: (1) If any of the headings below are not relevant to the application, N/A is included in the appropriate section.

(2) This report is to be read in conjunction with drawings.

0.1 Previous FSC Ref.: N/A

0.2 Nature and extent of the existing use of the building: Care centre.

0.3 TGDB: 2024 is the primary reference document for the development.
Reference to be made to relevant details to ensure that requirements are satisfied.

SECTION 1: MEANS OF ESCAPE IN CASE OF FIRE

1.1 FIRE COMPARTMENTS

- (a) Building divided into suitable fire compartments (Table 15, TGDB: 2024) and number assigned to each compartment.
- (b) Information in respect of each compartment:

Compartment No.	Description	Purpose Group	Risk * category	Area (m ²)	Limit on Area (m ²)	Volume (m ³)	Limit on Volume (m ³)
1	Care centre	5(b)	---	84	1900	c. 340	21000

The adjoining unit is classified as PG 1a – separating wall to roof.

*Note: For industrial or storage buildings the appropriate risk category as defined in Appendix D of Technical Guidance Document B: 2024

1.2 BASIS OF COMPLIANCE WITH REQUIREMENT B1 OF THE SECOND SCHEDULE TO THE BUILDING REGULATIONS

Code of Practice to which each compartment complies for means of escape purposes:

Comp./ Floor	Code of Practice	Comments
1	Section 1, TGDB: 2024.	

1.3 RELEVANT INFORMATION IN RELATION TO ESCAPE ROUTES WITHIN/ FROM COMPARTMENTS

Comp. No./ Floor/ Room	Area (m ²)	Max. * No. of Occupants	No. of Escape Routes Provided	Min. width Of escape Routes reqd. (mm)	Exit width Provided (mm)	Max. Travel Distance **		Allowable Travel Dist.	
						One Dir (m)	>One Dir (m)	One Dir (m)	>One Dir (m)
1	84	20	1	1 x 800	1 x 800	15.1	---	18	---

Emergency escape possible through kitchenette.

(a) Emergency evacuation would be in accordance with fire safety and evacuation plan.

(b)

* Calculation method used for occupancy level of compartment/ room: Actual max. potential.

** Compliance with maximum direct/ travel distance has been achieved.

Minimum height of escape routes: 2m

(c) Provisions for inner rooms if applicable: To 1.4.3.3, TGDB: 2024.

(d) Provisions for egress for disabled: Gr. floor level (+ DAC application).

(e) Other relevant provisions adopted in relation to escape routes:

Requirements of relevant subsections of Sections 1.9.1, 1.9.2, 1.9.3, 1.9.5, 1.9.6, 1.9.7, 1.9.8, 1.9.10, 1.9.11, 1.9.12, 1.9.13, TGDB included in fire safety provisions for the development

External escape routes even and surfaced.

1.4 DESIGN OF STAIRWAYS

(a) No. of protected stairways: N/A

(b) No. of external stairways: N/A

1.5 LIGHTING OF ESCAPE ROUTES

- (a) Escape lighting will be provided in accordance with Section 1.9.8/ Table 11, TGDB: 2024 and IS 3217: 2023
- (b) Escape lighting shall be provided in the following areas: Throughout to requirements of Table 11, TGDB: 2024/ Annex E, IS 3217: 2023 (+ requirements for specific areas under Clause 8.5) – see floor layout drawing.
- (c) Main performance requirements of the proposed system with reference to the building: 1.0 Lux intensity along defined escape routes and 0.5 Lux intensity along undefined escape routes (+ as required under Clause 8.5 for specific areas).
- (d) Other relevant design details of the proposed system: Design + certification by specialists.
- (e) Exit signs and markings shall be provided in accordance with the following: Annex B, I.S. 3217: 2023/ SI No. 02 of 2020. Maintained or combined type.
- (f) Exit signs and markings shall be provided in the following locations: Over exit doors and as necessary to ensure that exit routes are clearly defined.

1.6 ELECTRICAL INSTALLATION

The electrical installation shall be installed in accordance with: IS 10101: 2020 + A1: 2024. (to include isolation switch to 5.6.2.2.1, TGDB)
Overall building installation to be certified.

1.7 FIRE DETECTION AND ALARM SYSTEM

- (a) Fire detection and alarm system shall be provided in accordance with: Section 1.9.13/ Table 12 and IS 3218: 2024.
- (b) Type of fire detection and alarm system: Category L2/L3M.
- (c) Main performance requirements of the proposed fire detection and alarm system with reference to the building: Early warning to occupants in event of outbreak of fire.
- (d) Other relevant design details of the proposed system: Design + certification by specialists.

1.8 VENTILATION OF ESCAPE ROUTES

Provisions made for ventilation of escape routes: N/A

1.9 DOOR OPENINGS

Type of fastening device/s:

To requirements of B1.9.3.1, TGDB: 2024

Automatic door closers to IS EN 1154.

Other exit doors to include simple fastening which does not require use of key from escape side (1.9.3.1.1(c))

1.10 FIRE SAFETY SIGNS

To requirements of Section 1.9.12, TGDB: 2024.

Escape route to be clearly sign posted, fire door to include discs (Dia. 86, TGDB; 2024), fire point + manual call point are to include appropriate signage with basic user instructions.

1.11 MECHANICAL VENTILATION + AIR. CON. SYSTEMS.

N/A

SECTION 2: INTERNAL FIRE SPREAD (LININGS)

2.1 Basis of compliance with requirement B2 of the Second Schedule to Building Regulations: Section 2, TGDB: 2024.

2.2 SURFACE LININGS OF WALLS AND CEILINGS

(a) The surface linings of walls and ceilings shall meet with the following performance classifications (as outlined in Section 2.1.3: TGDB:2024) to requirements of Section 2.2/ Table 13, TGDB: 2024:

Comp. No.	*Room/Area	Surface Spread of Flame Rating	Lining Material	
			Walls	Ceilings
1	Throughout	Min. Class B - s3, d2	Concrete, plaster, skim on plaster/ plasterboard, prop. certified lining system/s to reqs. of Appendix A (A6), TGDB. No surface treatment.	Skim on plaster/ plasterboard, prop. certified lining system/s + as walls.

(b) Surface spread of flame classification is indicated on the floor plans of the building.

* Room classification e.g. bathroom, circulation space, other rooms.

2.3 FIRE RESISTING CEILINGS

Location	Fire Resistance (mins)	Surface spread of flame rating
Kitchenette	30	Class B – s3, d2

2.4 Variations to the above may apply as per the drawings submitted and in accordance with B2.2.2.1, TGDB: 2024 (walls only).

2.5 ROOFLIGHTS, WINDOWS, LIGHTING DIFFUSERS (Thermoplastic materials)

(a) Roof lights (if any): N/A

(b) All windows are of standard glass.

(c) Lighting diffusers (if any) to comply with Section 2.3.3/ Table 14, Dias 43 + 44, TGDB: 2024

SECTION 3: INTERNAL FIRE SPREAD (STRUCTURE)

- 3.1 Basis of compliance with requirements of B3 of the Second Schedule to Building Regulations: Section 3, TGDB: 2004.

3.2 ELEMENTS OF STRUCTURE

Schedule of elements of structure and fire resistance provided (refer to Appendix A, TGDB: 2024 – Tables 31 + 32):

Element of Structure	Type of Construction	Fire Resistance Provided *			Method of Exposure
		Load bearing Capacity (min)	Integrity (min)	Insulation (min)	
External walls	Block	60	60	60	Inside
Separating wall	Block	60	60	60	Each side
Fire door	Timber	---	30	30	Each side
Cav. Barriers	See fl. layout drawing.	---	30	15	Each side

NOTES: * When tested to IS EN 1992-1-2 (concrete)/ IS EN 1365 (1 - 6) for load bearing elements, IS EN 1364 (1 – 5) for non-load bearing elements.

Fire resisting steel structure tests to IS EN 1363-1, IS EN 1991-1-2, IS EN 1993-1-2, IS EN 1994-1-2. (Tests to various sections of B.S. 476 are permitted subject to appendix A7 of Technical Guidance Document B for existing elements of structure as approved).

- (b) Schedule of minimum periods of fire resistance required for elements of structure in accordance with Table 32, TGDB: 2024.

Purpose Group	Minimum period of fire resistance required for elements of structure (mins)
1a/ 5b	60 (+ 30 as above).

- (c) The building is unsprinklered.

Notes: “sprinklered” means that the building is fitted throughout with an automatic sprinkler system meeting the relevant recommendations of EN 12845: 2015 (B.S. 5306 : Part 2 or equivalent for existing certified system). Specialist design + certification.

- (d) Additional comments in relation to elements of structure: All materials to be installed and fixed to manufacturers’ instruction

3.3 FIRE DOORS

Location of fire doors	Type of glazing (uninsulated)	Min. fire resistance in terms of integrity (mins)
* FD30s door-set	Vision panels	30

Notes:

- (i) To meet requirements of Appendix B, TGDB:2024 (all components) + IS EN 1634 – 1 - 3: 2014 + A1: 2018/ BS 476 Part 22.
- (ii) Doors required to resist the passage of smoke at ambient temperature conditions should be indicated with the suffix S, i.e. these doors should have leakage rate not exceeding 3m³/m/hour (head and jams only) when tested at 25pa.
- (iii) A fire door-set includes the doorframe, door leaf associated ironmongery - Appendix B, TGDB.
- (iv) All fire doors should be identified by a permanently fixed small metal plate indicating the period of resistance, manufacturer, year of manufacturer and other pertinent details.
- (b) Fire door clearly identified on the drawing.

3.4 CAVITY BARRIERS

- (a) Schedule of cavity barriers provided (refer to Section 3.6, TGDB: 2024, Table 16 + 17, Dia. 53):

Cavity Barrier to be provided (state Location)	Fire Resistance (minutes)	Type of Construction used
Ext. walls: See floor layout drawing.	--/ 30/ 15	Rockwool/ equivalent.
Roof/ ceiling void: N/A	---	---

3.5 PROTECTION OF OPENINGS & FIRE STOPPING.

- (a) Openings for pipes in separating wall, fire resisting partitions, fire resisting ceiling to be fire stopped/ sealed (refer to 3.7.1/ 3.7.2/ 3.7.5 + Table 18, TGDB: 2024).
- (b) OPENINGS FOR FLUES AND DUCTS (incl. air conditioning and mech. Ventilation)

N/A

3.6 FIRE STOPPING AND FIRE SEALING

- (a) Provision is to be made for fire stopping and fire sealing in the building to the requirements of Section 3.7.5, TGDB: 2024 in the following situations:

At joints between elements which serve as a fire barrier to the passage of fire to be fire stopped.

Where pipes or service ducts, conduits, cables penetrate separating wall/ floors, fire resisting partitions, fire resisting ceiling. Seals to have same fire resistance as element penetrated by service.

- (b) See drawing for further relevant information.
- (c) Type of materials used for fire stopping and sealing: Rockwool, mortar, concrete, Gypsum Industries/ prop. certified products, intumescent materials.

3.7 ADDITIONAL PROVISIONS

Other relevant provisions in relation to compliance with requirements Section 3, TGDB: 2024.

Work to be carried out under supervision of suitably qualified person and to be fully certified.

SECTION 4: EXTERNAL FIRE SPREAD

- 4.1 Basis of compliance with requirement Section B4 of the Second Schedule to the Building Regulations: Section 4, TGDB: 2024

4.2 EXTERNAL SURFACE SPREAD OF FLAME RATING

External Wall No./ Elevation	Type of Construction	Fire Resistance (minutes)	Surface spread of flame rating on external face of wall
All	Block	60	Class B – s3, d2

4.3 UNPROTECTED AREAS

Requirements of Section 4.4, TGDB: 2024 to be satisfied. BRE BR 187 used under 4.4.6.1: TGDB: 2024.

All elevations > 3.5m from relevant boundaries – 100% unprotected area allowed for all enclosing rectangles.

4.4 ROOF COVERINGS:

- (a) Basis of compliance of roof covering material: Section 4.5, TGDB: 2024.
- (b) Minimum distance to relevant boundary: 0m (compart./ compart.).
- (c) Performance classification in accordance with Table 22/ Appendix A, Table 35, TGDB: 2024 - Broof (t4) designation.

4.5 PLASTIC ROOFLIGHTS (if any).

N/A

SECTION 5: ACCESS AND FACILITIES FOR THE FIRE BRIGADE

5.1 Basis of compliance with requirements B5 of the Second Schedule to the Building Regulations: Section 5, TGDB: 2024.

5.2 INTERNAL FIRE MAINS

Internal fire mains are designed and constructed in accordance with: N/A

5.3 EXTERNAL FIRE MAINS

Size of watermain: Existing housing scheme watermain.

No. of hydrants provided: 1 No. in immediate vicinity

Type of hydrant/ indicator plate: BS 750/ BS 3251.

5.4 ACCESS AND FACILITIES FOR THE FIRE SERVICE

(a) Vehicle Access Table 24, TGDB: 2024).

Height of Bld.(m)	Volume of Building above Ground (m ³)	Height of top Storey (m)	Ground Floor Area (m ²)	Vehicle Access	
				Required (m)	Provided (m)
Existing building	c. 575	---	146	3.9	20+

(b) Vehicle Access Route Specification (see 5.4.4/ Table 25, TGDB: 2024)

Min. Width of Road between Kerbs (m)	Min. width of gateways between kerb (m)	Min. turning circle between kerbs (m)	Min. turning circle between walls (m)	Min. clearance height (m)	Min. carrying Capacity (tonnes)
Scheme road	> 3.1	> 8.4	---	---	12.5

5.5 ACCESS FOR FIRE FIGHTING PERSONNEL

Provisions made for access for fire-fighting personnel: Doors, windows.

5.6 VENTILATION OF HEAT AND SMOKE

Smoke ventilation to be provided in accordance with: N/A

5.7. SPECIAL RISK AREAS

- (a) Boiler rooms and fuel stores (oil): N/A
- (b) High voltage discharge lighting, etc.: N/A
- (c) Natural gas/ LPG installation/s: N/A

5.8 MANUAL FIRE FIGHTING EQUIPMENT

Manual fire fighting equipment shall be provided in accordance with:

Fire extinguishers to IS EN 3 – 8: 2021 and IS 291: 2015 + A1: 2022.

Type	No. of	Location
Specialist supplier.	Ditto	Ditto

5.9 HEATING SYSTEM/S

System/s to comply with all relevant safety standards including following.

Electrical to IS 10101: 2020 + A1: 2024.

SEAI approved high efficiency heat transfer system (electrically powered).
Specialist design + certification.

5.10 ISOLATION SWITCHES.

Isolation switch/es to comply with 5.6.2.2.1, TGDB: 2024.
Specialist design + certification.

Any photovoltaic system which may be installed to comply with 5.6.2.3, TGDB and most up to date Standards/ Codes (to include emergency shut off system to Section 712, IS 10101 for firefighting operations). Safety requirements to be agreed with Galway Fire Service.
Design + certification by specialists.

5.11 COOKING SYSTEM

Electrical to IS 10101: 2020 + A1; 2024.

