



Rialtas na hÉireann
Government of Ireland

Part B / Technical Guidance Document B 2024

Eoin O'Dowd
Advisor
Building Standards Advisory Unit, DHLGH
NBCMSO Part B Seminar
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Overview

- 2024 Building Regulations Amendments
- Technical Guidance Document B 2024 – Fire Safety – Volume 1 – Buildings Other than Dwelling Houses
- Part B Transitional Arrangements
- Complimentary Initiatives



Building Regulations Amendments

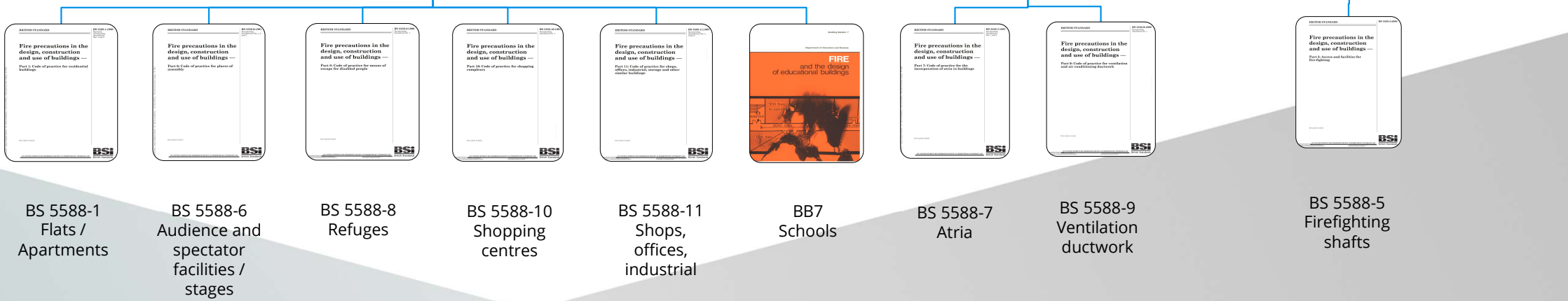
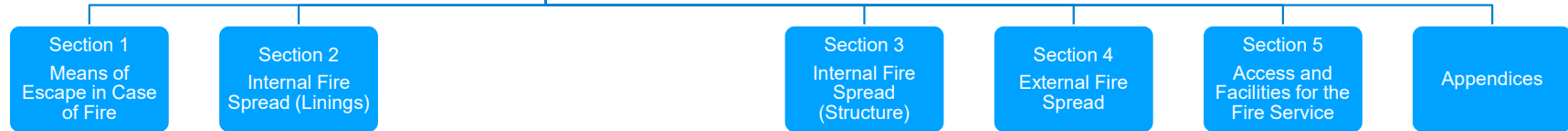


- Update to Article 5
- Update to Article 13 – Material Change of Use provisions
- Update to Parts B1, B4, B5
- Addition of Part B12 – Provision of Information



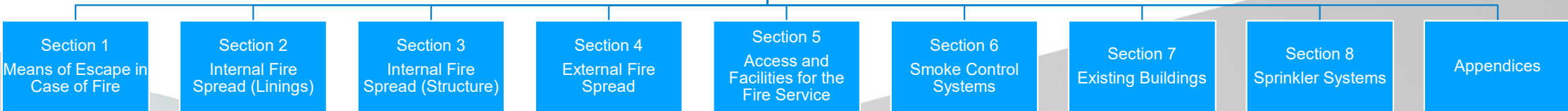
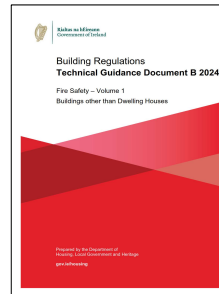
Technical Guidance Document B, 2006

Document Structure



Technical Guidance Document B, 2024

Document Structure



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Section 0 (Use of the Document)



- Scope (0.1.2)
- Alternative Approaches (0.2)
- Existing Buildings (0.3)
- Maintenance (0.4)
- Purpose Groups (0.5)
- Commissioning (0.8)
- Provision of Information (0.9)

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Government of Ireland

Building Regulations
Technical Guidance Document B
Fire Safety – Volume 1
Buildings other than Dwelling Houses

Prepared by the Department of Housing, Local Government and Heritage
gov.ie/housing

Table 1 Classification of Buildings by Purpose Group

Use	Group	Purpose for which a building or compartment of a building is used
Residential (Dwellings) – Dwelling House	1(a) 1(b) 1(d)	Dwelling House < 4.5m Dwelling House > 4.5m Community Dwelling House
Residential (Dwellings) – Flat (apartment)	1(c)	Separate and self-contained premises constructed or adapted for residential use and forming part of a building from some other part of which it is divided horizontally. ⁽¹⁾
Residential (Care Facility)	2(a)	(i) Hospital, (ii) nursing home, home for old people or for children, school or other similar establishment used as living accommodation or for the treatment, care or maintenance of persons suffering from illness or mental or physical disability, where such persons sleep on the premises.
Residential (Other)	2(b)	Hotel, hostel, guest building, residential college, hall of residence, student accommodation, and any other residential purpose not described above.
Office	3	Premises used for the purpose of administration, clerical work (including writing, book keeping, sorting papers, filing, typing, duplicating, machine calculating, drawing and the editorial preparation of matter for publication; handling money (including banking and building society work), telephone system operation).
Shop	4(a)	Premises used for a retail or wholesale trade or business (including retail sales by auction, self-selection and over-the-counter wholesale trading, the business of lending books or periodicals for gain and the business of a barber or hairdresser,) and premises to which the public is invited to deliver or to collect goods in connection with their hire, repair or other treatment, or where they themselves may carry out such repairs or other treatments.
Shopping Centre	4(b)	A building which comprises a number of individually occupied premises to which common access is provided principally for the benefit of shoppers.
Assembly and Recreation ⁽²⁾	5(a)	"place of assembly" includes— (i) a theatre, public library, hall or other building of public resort used for social or recreational purposes. (ii) a non-residential school or other educational establishment. (iii) a place of public worship. (iv) a public house, restaurant or similar premises used for the sale to members of the public of food or drink for consumption on the premises. (v) a sports pavilion, stadium, grandstand, or other spectator accommodation. (vi) a terminus, station or other facility for air, rail, road or sea travel.
Day Centre ⁽³⁾	5(b)	A building used for the provision of treatment or care to persons where such persons do not stay overnight, such as (i) a pre-school, a crèche, a day nursery, or similar facilities for children, or (ii) any other day centre, including a GP or dental surgery, primary care centre, facilities for medical treatment, or other similar facilities.
Industrial Normal Hazard ⁽⁴⁾	6(a)	Factories and other premises of normal hazard, used for manufacturing, altering, repairing, cleaning, washing, breaking-up, adapting or processing any article, generating power or slaughtering livestock.
Industrial High Hazard ⁽⁵⁾	6(b)	Factories and other premises of high hazard, used for manufacturing, altering, repairing, cleaning, washing, breaking-up, adapting or processing any article, generating power or slaughtering livestock.
Storage Normal Hazard ⁽⁶⁾	7(a)	Place for storage or deposit of goods or materials of normal hazard other than those described under 7(c)
Storage High Hazard ⁽⁶⁾	7(b)	Place for storage or deposit of goods or materials of high hazard other than those described under 7(c)
Car Park	7(c)	Car parks designed to admit or accommodate only cars, motorcycles passenger vehicles or other light goods vehicles, not more than 2,500 kilograms vehicle weight.
Other non-residential	8	Any other non-residential purpose not included in any other purpose group

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Holistic Application



- Methods of Measurement - Doors
- Door Widths
- Lobbies
- Vision Panels
- Helical and Spiral Stairs
- Slip Resistance



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Section 1 (Means of Escape in Case of Fire)



- Design for Horizontal escape (1.4)
 - All uses excluding: dwelling units and common areas of flats (1.6), shopping centres (1.7), small premises (1.8),
Note: Hospitals and sports grounds - out of scope
- Storey exits in industrial, storage and office buildings
- Single escape route
 - Residential (care facility) – 20
 - Day Centre (crèche, pre-school, day nursery) – 20
 - School, all other uses – 60

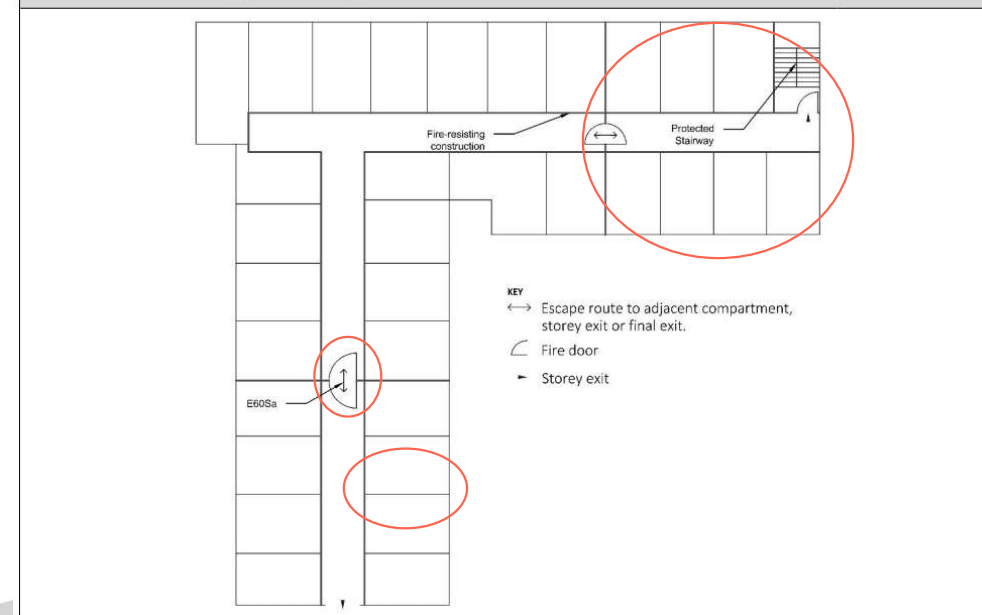
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Section 1 (Means of Escape in Case of Fire)



- Design for Horizontal escape (1.4)
- Care Facilities
 - Door closing devices
 - Walls between bedrooms
 - No of bed spaces in a compartment

Diagram 11 Progressive Horizontal Evacuation in Residential (Care Facility) Buildings Para 1.4.5.3

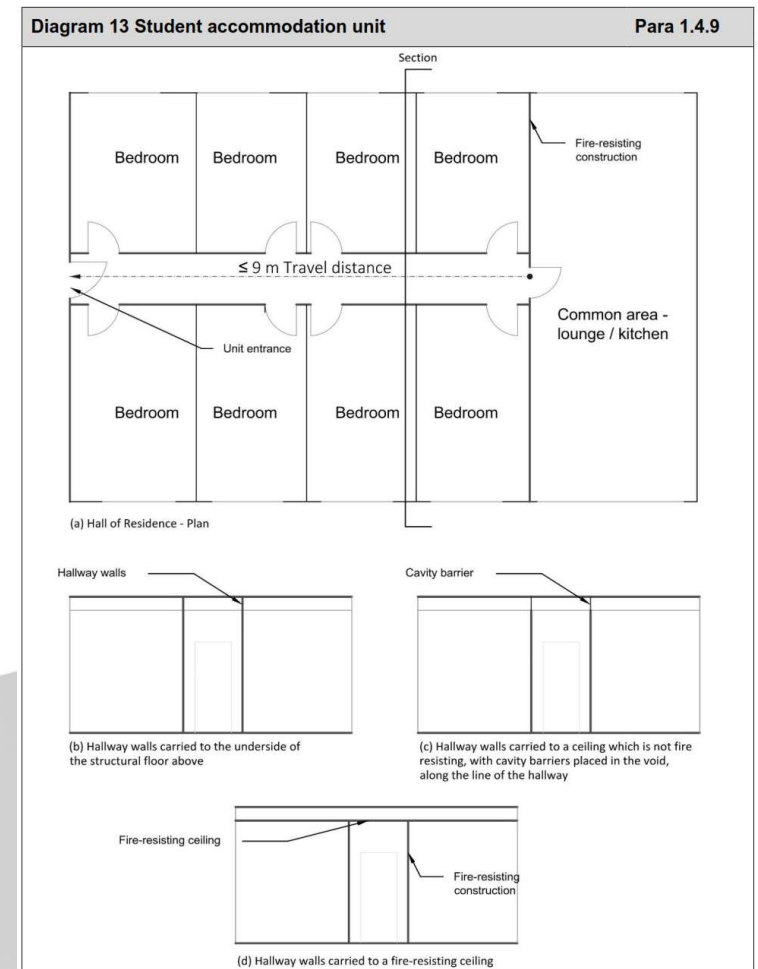


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Section 1 (Means of Escape in Case of Fire)



- Design for Horizontal escape (1.4)
 - *External Escape routes*
 - *Audience and Spectator facilities*
 - Availability of exits
 - *Premises provided with a stage*
 - Buildings with a dedicated stage area
 - *Student accommodation units*



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Section 1 (Means of Escape in Case of Fire)



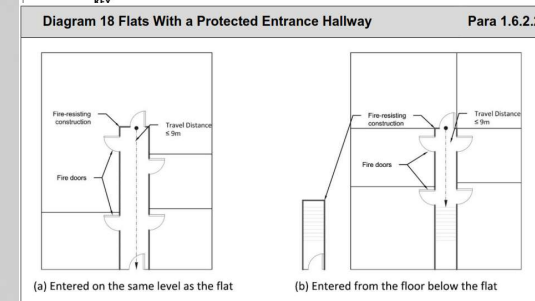
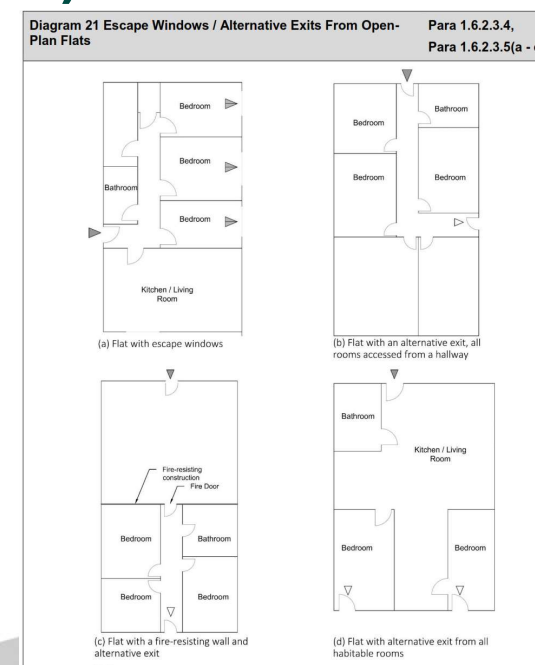
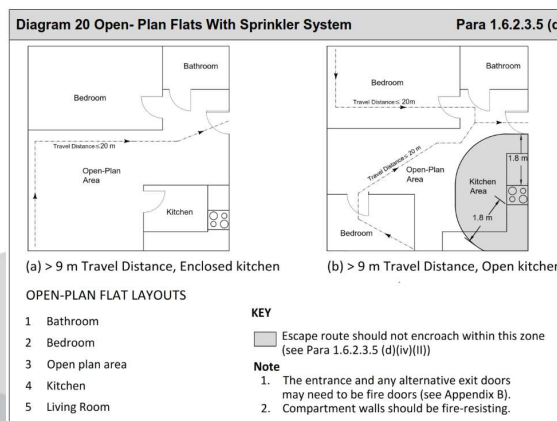
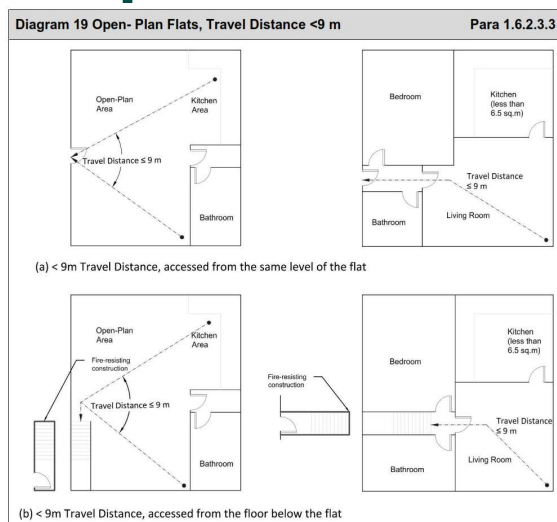
- Design for Vertical escape (1.5)
 - Single escape routes
 - Assembly & Recreation building or Day centre building (PG 5(b)(ii) < 5m
 - Day centre building (PG 5(b)(i) – ground and upper storey, < 20 children
 - Building containing flats meeting Subsection 1.6
 - Any other use up to 11 m, or basements to 3 m

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Section 1 (Means of Escape in Case of Fire)



- Means of Escape from flats (apartments) (1.6)
- PEH flats
- Open Plan Flats
 - Travel distance?
 - Availability of an alternate escape route?
 - Provision of suppression?



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Section 1 (Means of Escape in Case of Fire)



- Means of Escape from flats (apartments) (1.6)
- Maisonettes
 - Floor < 4.5 m (A.G.L)
 - Floor > 4.5 m (A.G.L)
 - Over 7.5 m high

Diagram 23 Maisonettes - No floor more than 4.5 m above ground level Para 1.6.3.1

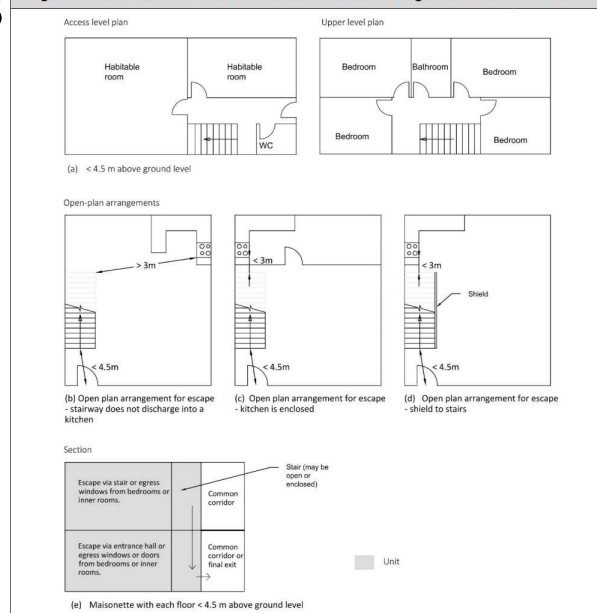
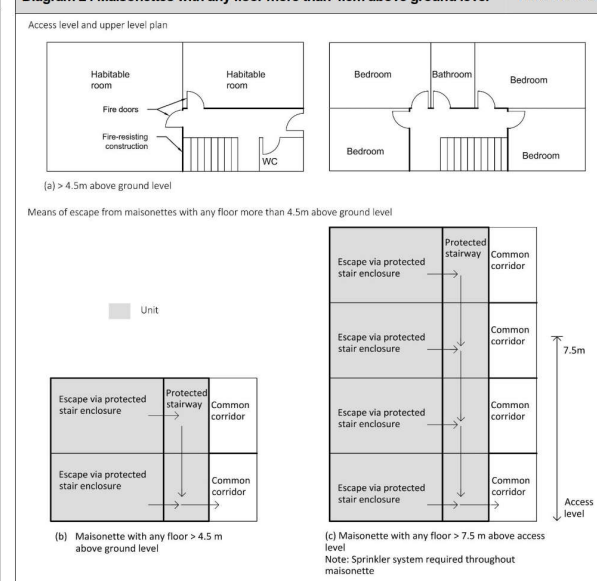


Diagram 24 Maisonettes with any floor more than 4.5m above ground level Para 1.6.3.2

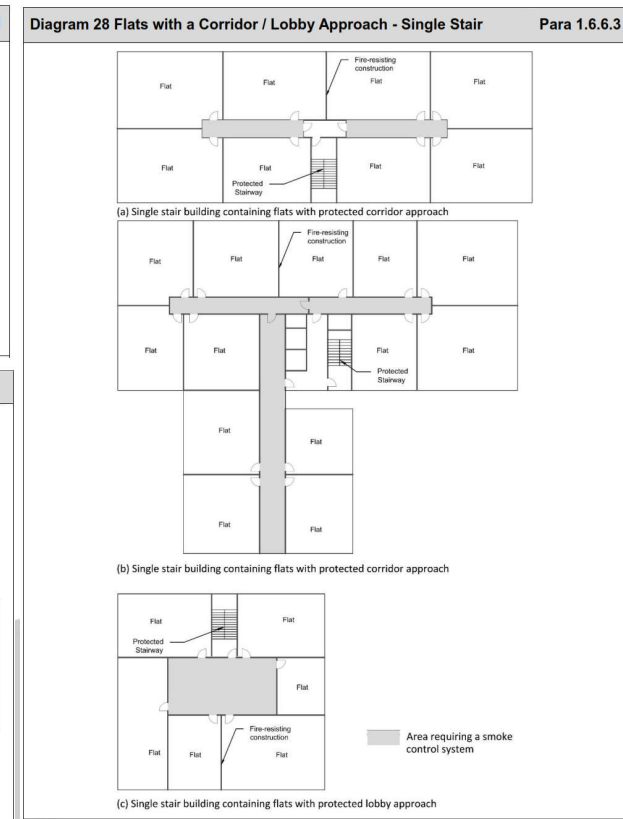
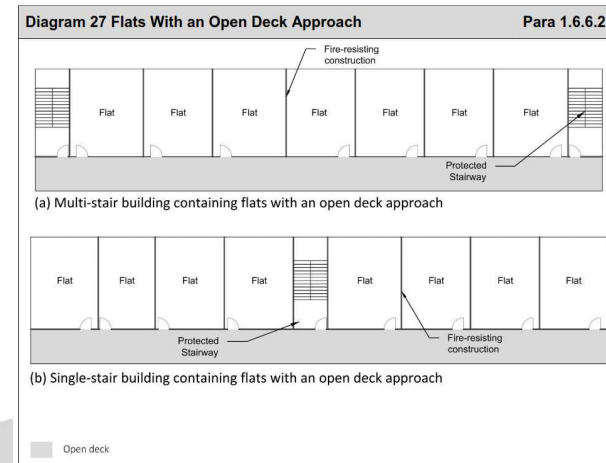
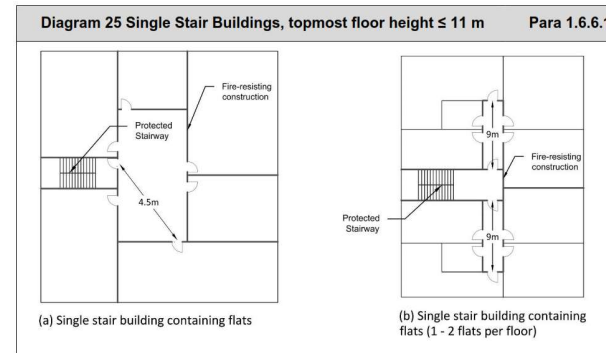


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Section 1 (Means of Escape in Case of Fire)



- Means of Escape from flats (apartments) (1.6)
 - Vertical escape
 - Direct-to-stair
 - Open Deck
 - Lobby / corridor
 - *Stair Width*
 - *Ancillary accommodation*



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Section 1 (Means of Escape in Case of Fire)



- General Provisions (1.9)
 - *Fire Detection and Alarm Systems*

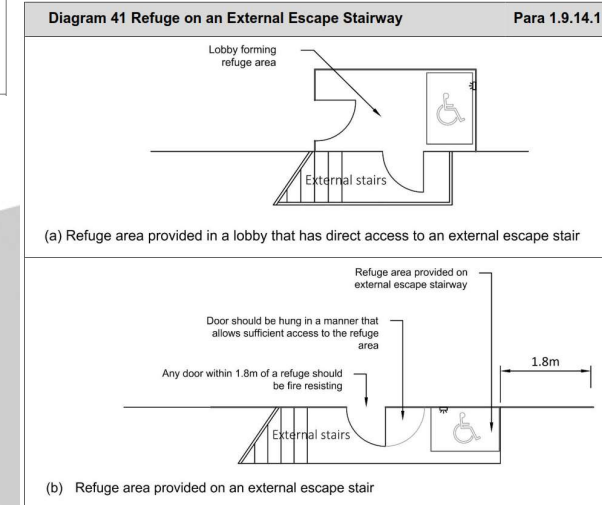
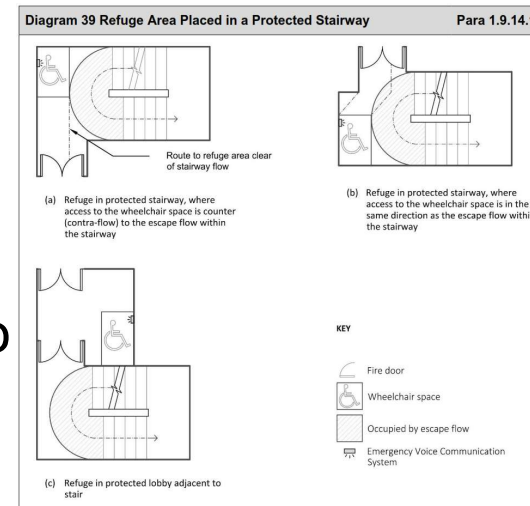
Table 12 Provision of Fire Detection and Alarm System		Para 1.9.13
Purpose Group ⁽⁴⁾	System coverage area ⁽¹⁾	System Classification
1c,	Defined escape routes, in common protected areas (see Para 1.9.13.3.1) ⁽²⁾	L3X
	In individual flats (see Para 1.9.13.3.2) ⁽³⁾	Grade D LD2
2a, 2b	Coverage to all areas	L1
Hospitals	See HTM 05/03	L1
Small guest houses (Para 1.5.8.2)	See Para 1.9.13.3.2	Grade D LD2
3, 4a, 8	Defined escape routes, areas off defined escape routes.	L3
4b	Defined escape routes, areas off defined escape routes, Interconnected alarm systems in different occupancies.	L3X
5a, 5b, 6a, 6b,7a, 7b	Defined escape routes, areas off defined escape routes, places of special fire risk.	L2/L3
7c	Defined escape routes, areas off defined escape routes undefined escape routes.	L3

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Section 1 (Means of Escape in Case of Fire)



- General Provisions (1.9)
 - *Refuges*
 - In stairways
 - A lobby that has direct access to a stair
 - Adjoining compartment, excluding flats
 - On an external escape stairway
 - In the open air, e.g. common deck



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Section 2 (Internal Fire Spread (Linings))



- General Provisions (2.2)
 - *Alignment to European RtF*
 - *Surfaces excluded*
 - *Use of appropriate alternative test methods*

Table 13 Reaction-to-fire Classifications		Subsection 2.2
Classification to I.S. EN 13501-1	Room / Area	
Class C - s3, d2	All purpose groups (except those listed below) ⁽¹⁾	
Class D - s3, d2	Bathrooms, toilets and shower rooms	
Class B - s3, d2	Rooms exceeding 30 m ² in:	
	(a) Residential (care facility) (Purpose Group 2(a)), and	
	(b) Assembly and recreation buildings(Purpose Group 5(a))	
	(c) Day centre buildings, (Purpose Group 5(b))	
	Circulation spaces ⁽²⁾	
	The soffit of a fire-resisting ceiling	
	Places of special fire risk (see Subsection 0.10).	

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Section 3 (Internal Fire Spread (Structure))



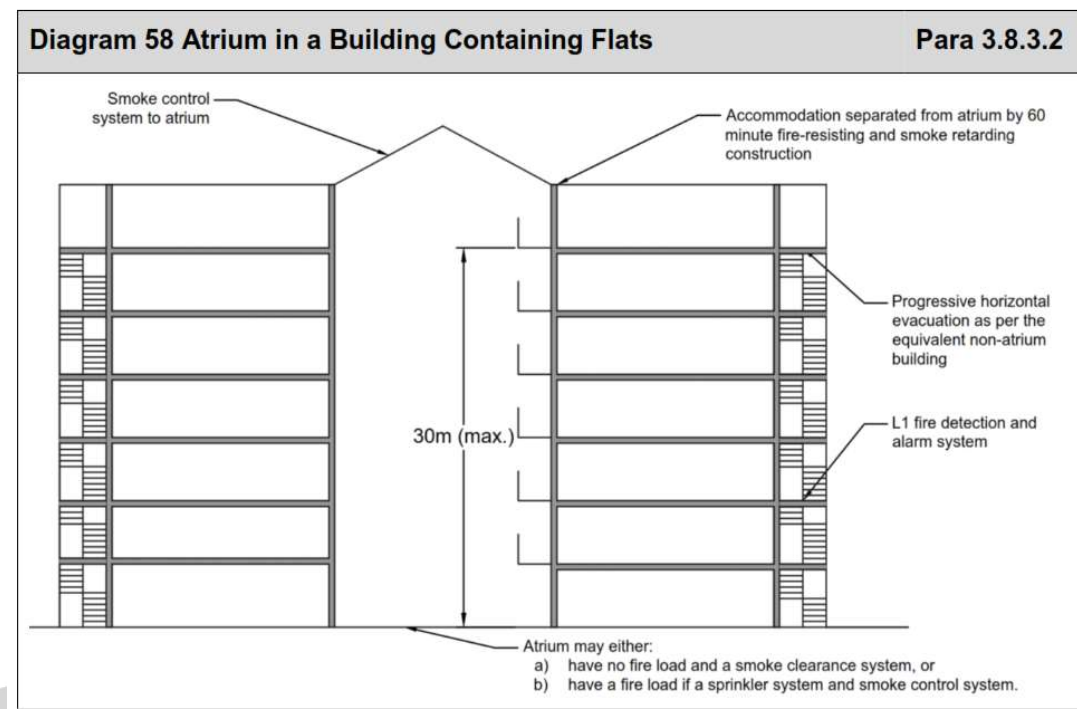
- Construction of Compartment walls and floors (3.5)
 - *Buildings > 11 m*
 - *Buildings > 15 m*
 - *Junction of compartment walls with external walls*
 - *Fire doors in separating walls*

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Section 3 (Internal Fire Spread (Structure))



- Special Provisions (3.8)
 - *Car Parks*
 - *Atria*
 - Flats
 - Care facilities
 - Other Residential
 - Offices
 - Other non-residential



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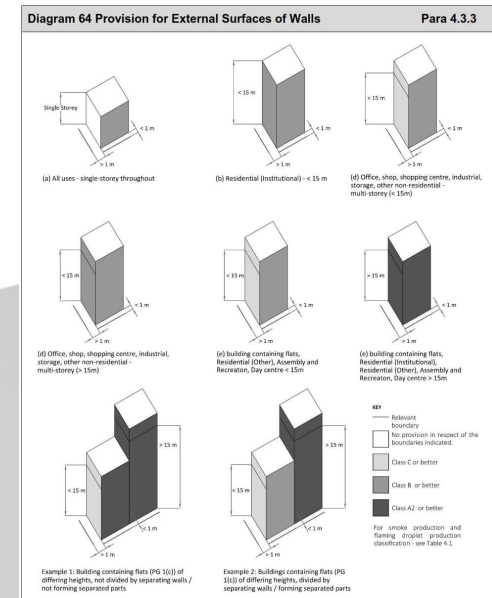
Section 4 (External Fire Spread)



- External walls (4.3)
 - *Restriction of fire spread on external walls*
 - Table 19, or
 - BS 8414
 - *RtF to European classification (EN 13501)*
 - Walls and roof coverings
 - *Excluded materials*
 - *Elements fixed to the external wall*

Table 19 Reaction-to-fire Classification for External Walls

Purpose Group	Height of topmost storey	Less than 1m to relevant boundary ⁽⁵⁾	More than 1m to relevant boundary ⁽⁵⁾
2a, 2b, 3, 4, 5, 6, 7, 8	Single storey	Class B-s3, d2 ⁽²⁾	No requirement
2a	More than one storey, < 15 m	Class B-s3, d2 ⁽²⁾	Class B-s3, d2 ⁽¹⁾⁽²⁾
3, 4, 6, 7, 8	More than one storey, < 15 m	Class B-s3, d2 ⁽²⁾	Class C-s3, d2 ⁽¹⁾⁽²⁾
3, 4, 6, 7, 8	More than one storey, > 15 m	Class B-s3, d2 ⁽³⁾⁽⁴⁾⁽⁶⁾	Class B-s3, d2 ⁽³⁾⁽⁴⁾⁽⁶⁾
1c, 2b, 5	More than one storey, < 15 m	Class B-s3, d2 ⁽²⁾	Class C-s3, d2 ⁽¹⁾⁽²⁾
1c, 2a, 2b, 5	More than one storey, > 15 m	Class A2-s3, d2 ⁽³⁾⁽⁴⁾	Class A2-s3, d2 ⁽³⁾⁽⁴⁾

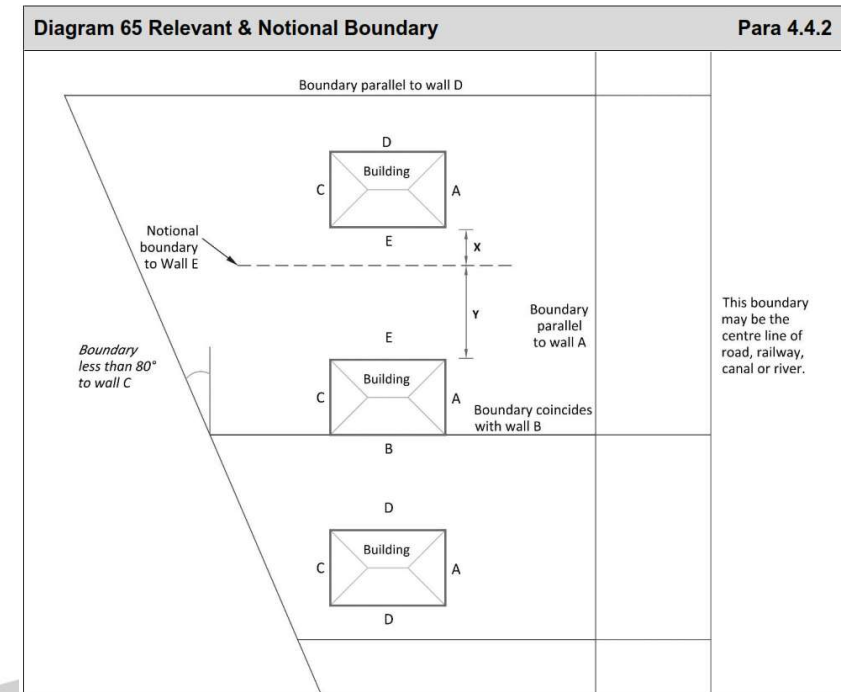


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Section 4 (External Fire Spread)



- Space separation (4.4)
 - *Within 0.5m of a boundary*
 - *Between 0.5 m and 1.0 m*
 - *> 1.0 m*
- *3 Methods of calculating unprotected area*

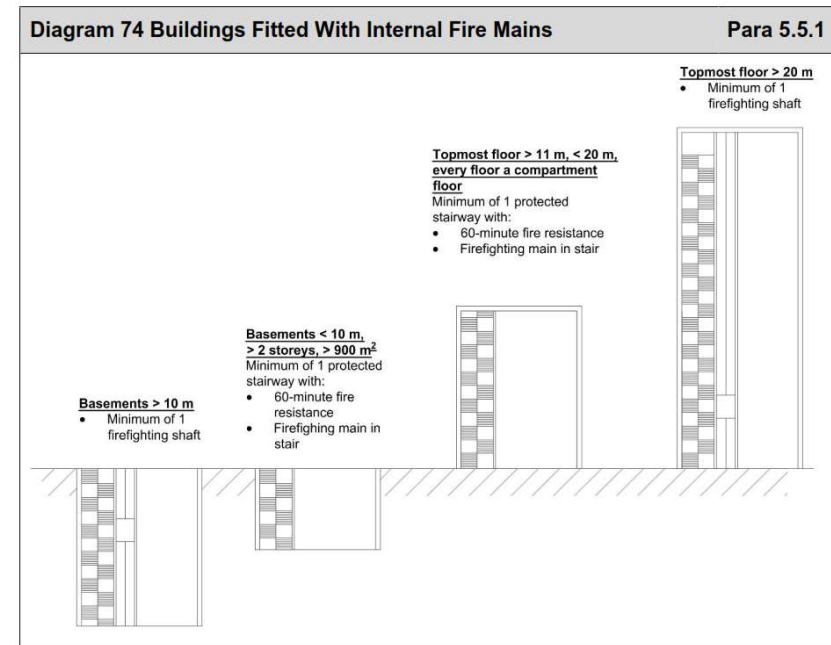




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Section 5 (Access and Facilities for the Fire Service)

- Fire Mains (5.3)
 - *Sleeping risk buildings, shopping centres > 11, < 20m*
 - *All buildings > 20 m*
 - *Basements < 10 m, >2 floors, > 900m²*
 - *Basements > 10 m*





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Section 5 (Access and Facilities for the Fire Service)

- Areas requiring special consideration (5.6)
 - *Electrical Isolation*
 - Premises
 - Discharge lighting
 - Photovoltaic panels

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Section 6 (Smoke Control Systems)



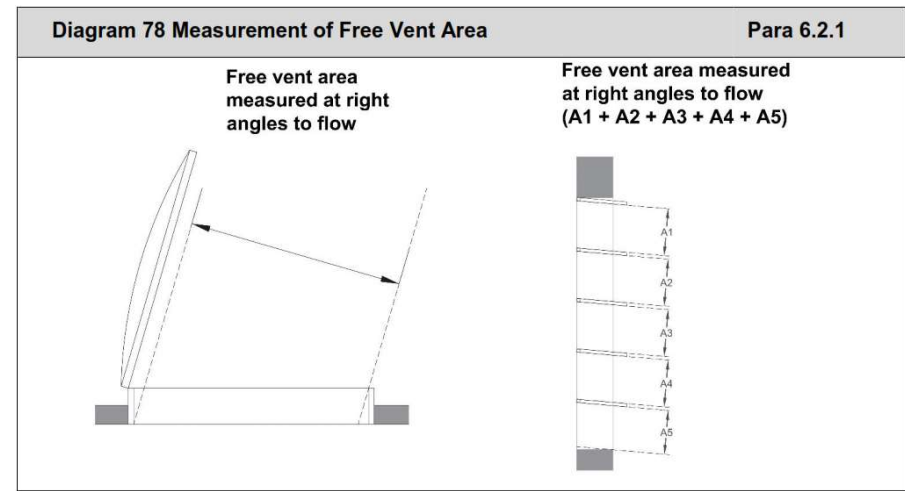
- Smoke Control Systems
 - Protected stairway - Subsection 6.2.
 - Firefighting shaft - Subsection 6.3.
 - Atria - Subsection 6.4.
 - Basements - Subsection 6.5.
 - Flats - Subsection 6.6.
 - Industrial and storage buildings, with large undivided and windowless spaces,
 - - Subsection 6.7.
 - Car parks - Subsection 6.8.
 - Assembly and recreation buildings - Subsection 6.9.
 - Shopping centres - Subsection 6.10.

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Section 6 (Smoke Control Systems)



- General Provisions (6.1)
 - *Wall mounted vents*
 - *Mechanical vents*
 - *Natural vents*
- Protected Stairways (6.2)
 - *AOV's*



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Section 7 (Existing Buildings)



- Measured Approach

Apply Sections 1 – 6

Apply prescriptive provisions of
Section 7

Apply compensating measures

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Section 7 (Existing Buildings)



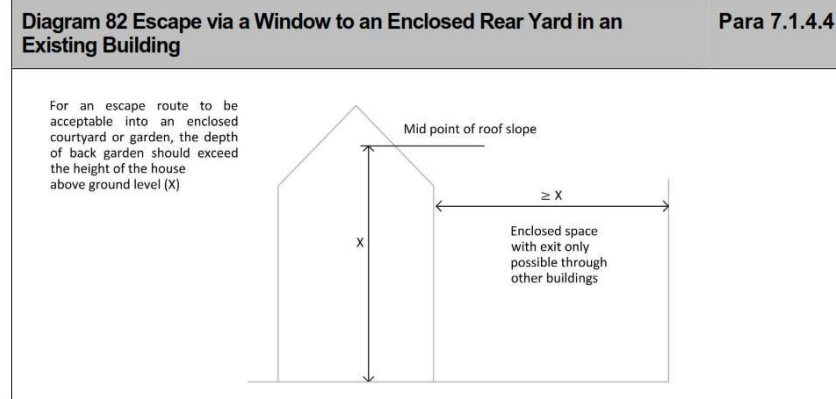
- General Provisions (7.0)
 - *Consolidation of existing TGD B provisions relating to existing buildings*
 - *Section 1 – 6 – Classification to EN 13501 for new building elements*
 - *Retention of classification to BS 476 for existing building elements*
 - *Expansion of use of compensating measures*

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Section 7 (Existing Buildings)



- Means of Escape (7.1)
 - *0.75 m / 50 persons door width retained*
 - *Lobbies to offices < 4 storeys, single stairs*
 - *Lobbies to flats < 4 storeys, single stairs*
 - *Stair width for flats 0.8m < 50 persons, 0.9m < 100 persons*
 - *Maisonettes accessed directly from the exterior*
 - *Escape to an enclosed garden*
 - *External escape stairways*



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Section 7 (Existing Buildings)

- Internal fire Spread (Linings) (7.2)
 - *BS 476*
- Internal fire Spread (Structure) (7.3)
 - *Timber floors in existing buildings*
 - BR 187
 - BR 208
 - *Compartment floors in existing buildings > 11m*
 - *Compartment walls in existing buildings > 11m*
 - *Retention of 'Diagram 17', 'Diagram 22' – for existing buildings / situations*
 - *Doors in separating walls*

Diagram 84 Enclosures for Drainage or Water Supply Pipes Para 7.3.8

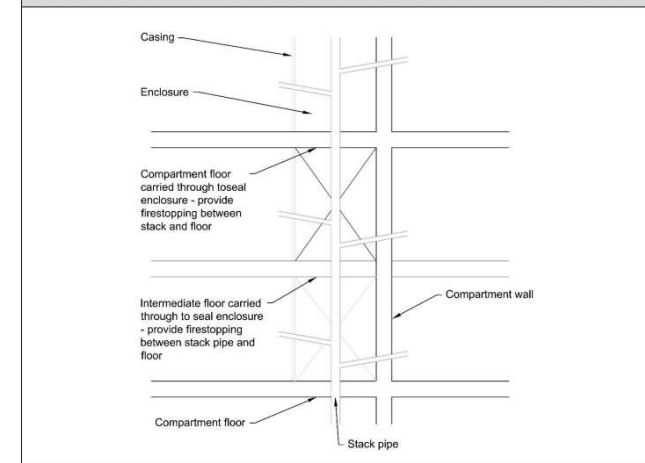
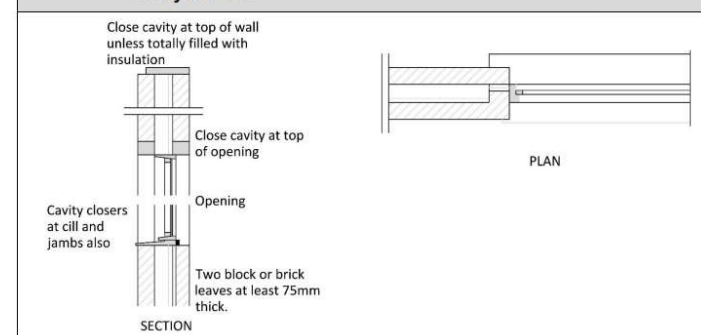


Diagram 83 Masonry Cavity Walls Excluded From Provisions for Cavity Barriers Para 7.3.6.1



- Note:**
Combustible material should not be placed in or exposed to the cavity except for:
- (a) timber lintel, window or door frame, or end of timber joists;
 - (b) pipe, conduit or cable;
 - (c) DPC, flashing closer or wall tie;
 - (d) domestic meter cupboard provided that
 - (i) there are not more than two cupboards to a dwelling
 - (ii) the opening in the outer wall leaf is not more than 0.8 m x 0.5 m for each cupboard, and
 - (iii) the inner leaf is not penetrated except by a sleeve not more than 80 mm x 80 mm which is fire-stopped;
 - (e) thermal insulating material;
 - (f) membranes (air tightness / breather membranes / DPC / DPM).

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Section 8 (Sprinklers)



- Sprinklers
 - *Buildings containing flats > 15 m*
 - *Residential (care facility) buildings 2 + storeys, sleeping risk on upper levels*
 - *Student accommodation units*
 - *Shopping centres*
 - *Separated stages*
 - *Non-residential buildings > 30 m*

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Appendices



- Appendix A
 - *Fire resistance classification to EN 13501*
- Appendix B
 - *Signs*
 - *Identification*
 - *Glazing*
- Appendix D
 - *High hazard storage buildings – racking > 7m*

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Appendices

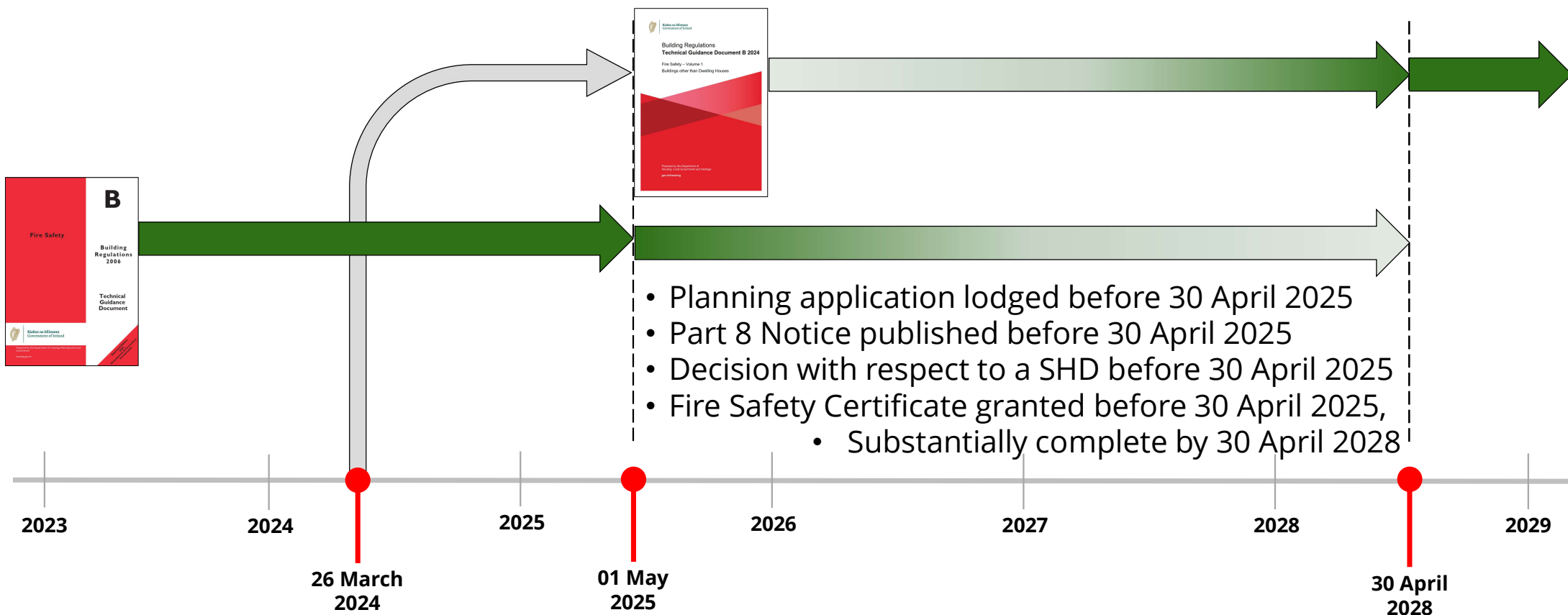


- Appendix H

Building Height	Single Storey	Topmost floor ≤ 5 m	Topmost floor > 5 m, ≤ 11 m	Topmost floor > 11 m, ≤ 15 m
Min. no of Stairways	N/A	PG 2(a): 2 Stairways (i) All other PG's: 1 (i)	PG 2(a), 5(a), 5(b): 2 Stairways (i) All other PG's: 1 (i)	PG 2(a), 2(b), 3, 4, 5, 6, 7, 8: 2 Stairways (i) PG 1(c): 1(i)
Compartment wall and floor RTF classification	PG 2(a): A2-s3,d2 (walls only)	PG 2(a): A2-s3,d2 (vi, vii) All other PG's: No requirement	PG 2(a): A2-s3,d2 (vi, vii) All other PG's: No requirement	All PG's: A2-s3,d2 (vi, vii)
External wall < 1 m to Boundary RTF classification	PG 2a, 2b, 3, 4, 5, 6, 7, 8: B-s3,d2 (ii) PG 1c: N/A	PG 2a: Class B-s3,d2 (ii) PG 1c, 2b, 5: B-s3,d2 (ii) PG 3, 4, 6, 7, 8: B-s3,d2 (ii)	PG 2a: B-s3,d2(ii) PG 1c, 2b, 5: B-s3,d2(ii) PG 3, 4, 6, 7, 8: B-s3,d2(ii)	PG 2a: B-s3,d2(ii) PG 1c, 2b, 5: B-s3,d2 (ii) PG 3, 4, 6, 7, 8: B-s3,d2(ii)
External wall > 1 m to Boundary RTF classification	PG 2a, 2b, 3, 4, 5, 6, 7, 8: No Requirement PG 1c: N/A	PG 2a: B-s3,d2(ii) PG 1c, 2b, 5: C-s3,d2 (ii) PG 3, 4, 6, 7, 8: C-s3,d2 (ii)	PG 2a: B-s3,d2 (ii) PG 1c, 2b, 5: C-s3,d2(ii) PG 3, 4, 6, 7, 8: C-s3,d2(ii)	PG 2a: B-s3,d2(ii) PG 1c, 2b, 5: C-s3,d2(ii) PG 3, 4, 6, 7, 8: C-s3,d2(ii)
Firefighter access	All PG's: Perimeter access based on floor area & volume	All PG's: Perimeter access based on floor area & volume	All PG's: Perimeter access based on floor area & volume	PG 1(c), 2(a), 2(b): Protected stair and firefighting main All other PG's: Perimeter access based on floor area & volume
Sprinklers	PG 4(b): Throughout (iv) All other PG's: N/A(v)	PG 2(a), PG 4(b): Throughout (iv) All other PG's: N/A(v)	PG 2(a), PG 4(b): Throughout (iv) All other PG's: N/A(v)	PG 2(a), PG 4(b): Throughout (iv) All other PG's: N/A(v)
Other		External escape stairways permitted in limited circumstances	External escape stairways permitted in limited circumstances	External escape stairways not permitted (vi)
	(i) Additional stairways may be required to satisfy escape requirements for travel distance, occupant capacity, etc. (ii) Applicable only to the outermost wall element. (iii) Applicable to the whole wall build-up. (iv) Sprinklers are not required in sterile mall areas of a shopping centre (v) Sprinklers may be required due to other provisions of this document (vi) For existing buildings, see Section 7 (vii) For certain walls and floors in a shopping centre, see Subsection 1.7			

Building Height	Topmost floor > 15 m, ≤ 20 m	Topmost floor > 20 m, ≤ 30 m	Topmost floor > 30 m, < 60 m	Topmost floor > 60 m
Min. no of Stairways	PG 2(a), 2(b), 3 - 8: 2 Stairways (i) PG 1(c): 1(i)	PG 2(a), 2(b), 3 - 8: 2 Stairways (i) PG 1(c): 1(i)	PG 2(a), 2(b), 3 - 8: 2 Stairways (i) PG 1(c): 1(i)	PG 2(a), 2(b), 3 - 8: 2 Stairways (i) PG 1(c): 1(i)
Compartment wall and floor RTF classification	All PG's: A2-s3,d2 (vi, vii)	All PG's: A2-s3,d2 (vi, vii)	All PG's: A2-s3,d2 (vi, vii)	All PG's: A2-s3,d2 (vi, vii)
External wall < 1 m to Boundary RTF classification	PG 1c, 2a, 2b, 5: A2-s3,d2 (iii) PG 3, 4, 6, 7, 8: B-s3,d2 (iii)	PG 1c, 2a, 2b, 5: A2-s3,d2 (iii) PG 3, 4, 6, 7, 8: B-s3,d2 (iii)	PG 1c, 2a, 2b, 5: A2-s3,d2 (iii) PG 3, 4, 6, 7, 8: B-s3,d2 (iii)	PG 1c, 2a, 2b, 5: A2-s3,d2 (iii) PG 3, 4, 6, 7, 8: B-s3,d2 (iii)
External wall > 1 m to Boundary RTF classification	PG 1c, 2a, 2b, 5: A2-s3,d2 (iii) PG 3, 4, 6, 7, 8: B-s3,d2 (iii)	PG 1c, 2a, 2b, 5: A2-s3,d2 (iii) PG 3, 4, 6, 7, 8: B-s3,d2 (iii)	PG 1c, 2a, 2b, 5: A2-s3,d2 (iii) PG 3, 4, 6, 7, 8: B-s3,d2 (iii)	PG 1c, 2a, 2b, 5: A2-s3,d2 (iii) PG 3, 4, 6, 7, 8: B-s3,d2 (iii)
Firefighter access	PG 1(c), 2(a), 2(b): Protected stair and firefighting main All other PG's: Perimeter access based on floor area & volume	All PG's: Firefighting Shaft	All PG's: Firefighting Shaft	All PG's: Firefighting Shaft
Sprinklers	PG 1(c), PG 2(a), PG 4(b): Throughout (iv) All other PG's: N/A(v)	PG 1(c), PG 2(a), PG 4(b): Throughout (iv) All other PG's: N/A(v)	PG 1(c), PG 2(a), PG 4(b): Throughout (iv) All other PG's: N/A(v)	PG 1(c), PG 2(a), 3, 4(a), 4(b), 5, 6, 7, 8: Throughout (iv) PG 1(c), 2(b): N/A(v)
Other	External escape stairways not permitted (vi)	Discounting of stairways required (excl. PG 3, 4(a)) Lobbies to stairways required External escape stairways not permitted (vi)	Discounting of stairways required (excl. PG 3, 4(a)) Lobbies to stairways required External escape stairways not permitted (vi)	Discounting of stairways required (excl. PG 3, 4(a)) Lobbies to stairways required External escape stairways not permitted (vi)

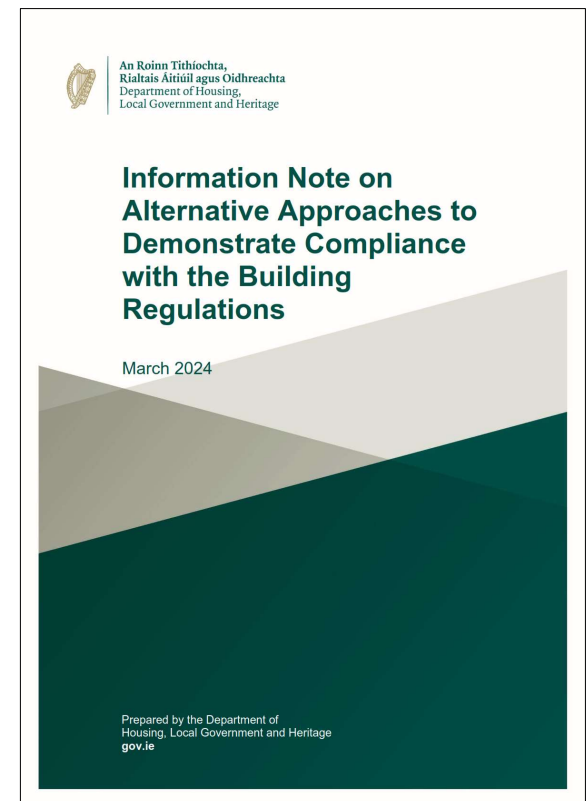
Technical Guidance Document B Transition



Complimentary Initiatives



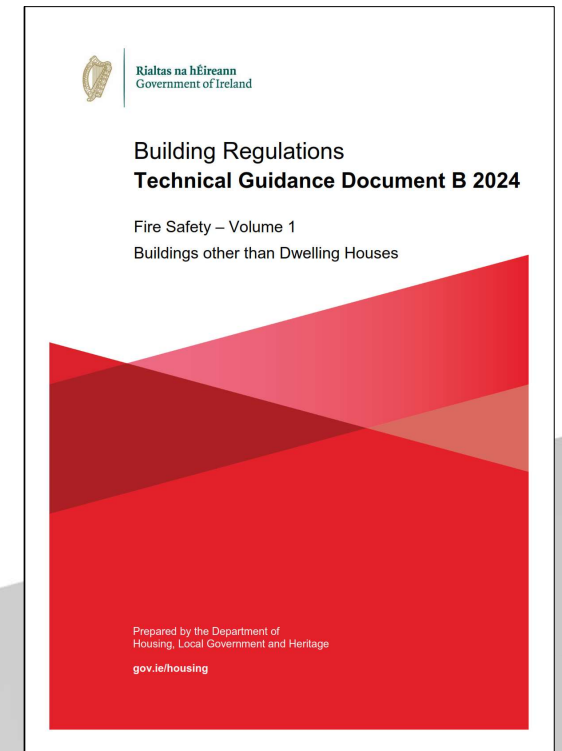
- Publication of an *Information note on Alternative Approaches*
- Research by Construct Innovate - National Construction Technology Centre
 - *Existing buildings*
 - *Universal Design Buildings*
 - *Standardised construction details*
- Fire Safety Research Group
 - *Composed of representatives from Building Standards, NDFEM, 6 Fire Authorities*
 - *Topics include:*
 - International benchmarking
 - Escape from buildings containing flats
 - Smoke control in buildings containing flats
 - Car Parks



In conclusion ...



- Clarity
- Consistency
- Flexibility
- Simplicity
- Alignment with national policy
- Supporting Re-use
- Enhanced provisions for safety for all
- Alignment with Building Regulations
- Modernisation
- Continuation



Thank you!



Questions?