ALLCERT
BUILDING COMPLIANCE - ACCESS CONSULTING - BUILDING CERTIFICATION

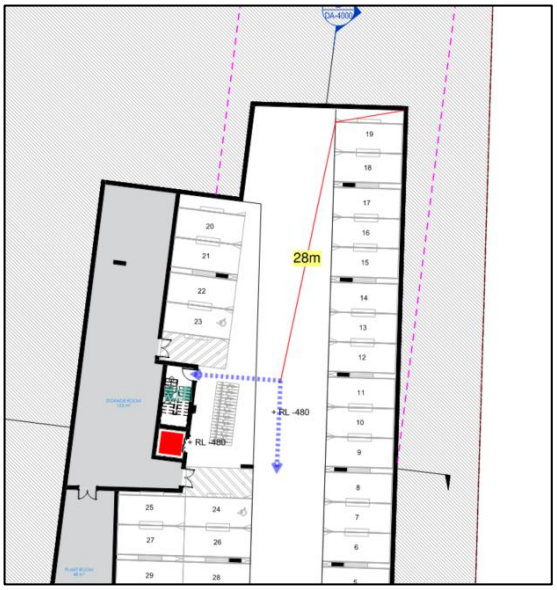
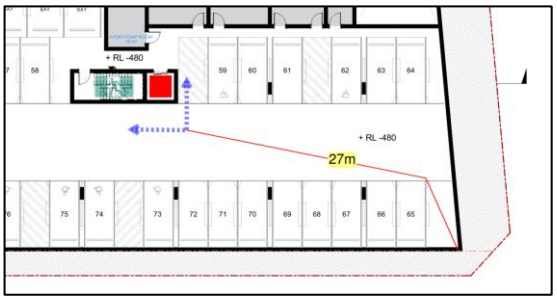
BUILDING CODE OF AUSTRALIA 2022 ASSESSMENT REPORT

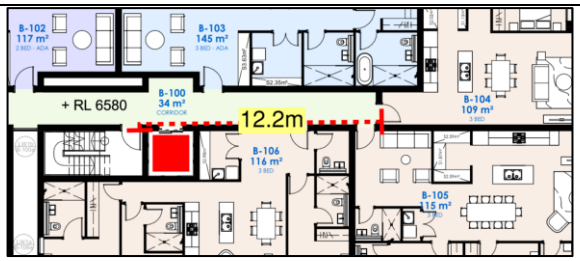
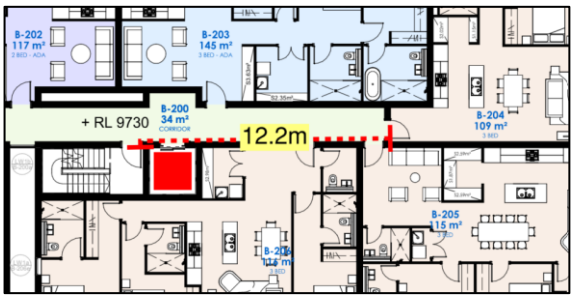
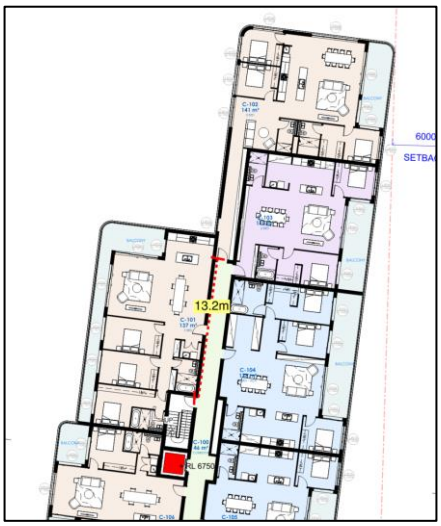
Project Name:	**Residential Flat Building**
Project Address:	**20 Heradale Parade, Batemans Bay**
Date:	**3 September 2024**
Project No:	**220192**

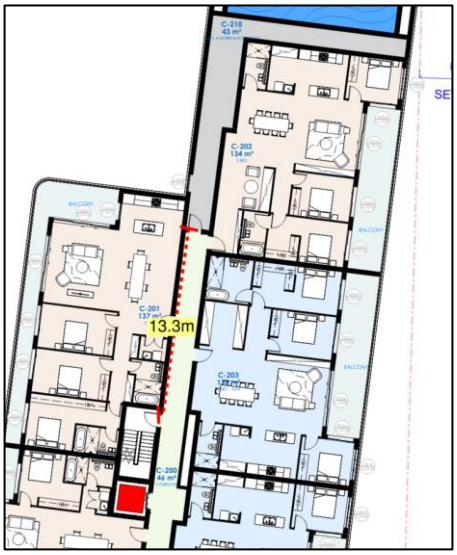
1.0 EXECUTIVE SUMMARY

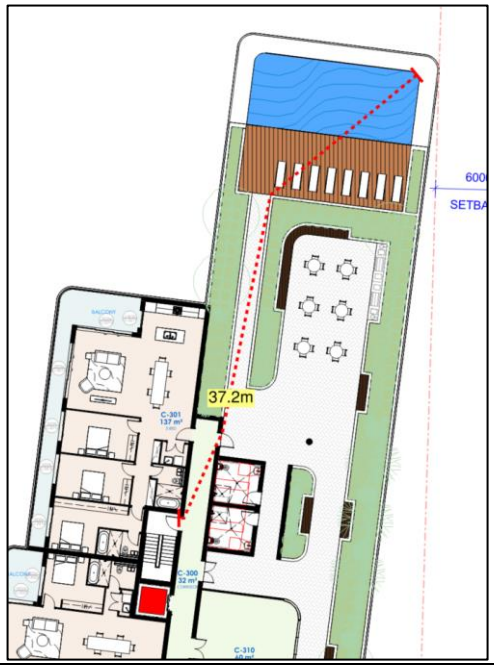
AllCert Pty Ltd have been commissioned by Place Studio to provide a Building Code of Australia assessment report of the proposed development at 20 Heradale Ave, Batemans Bay, NSW 2536. The proposed development includes the construction and operation of the new residential flat building.

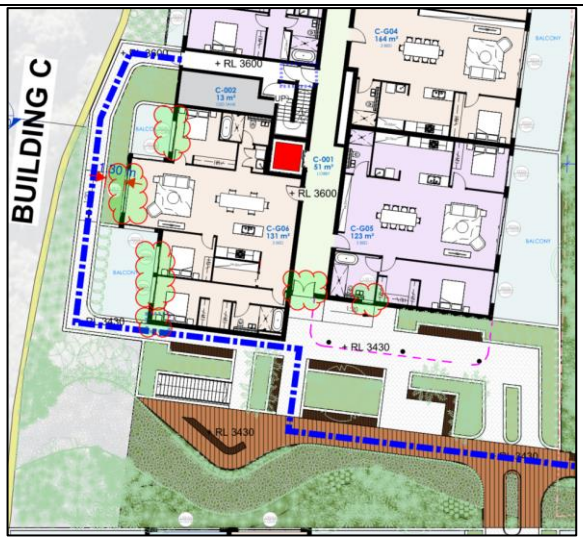
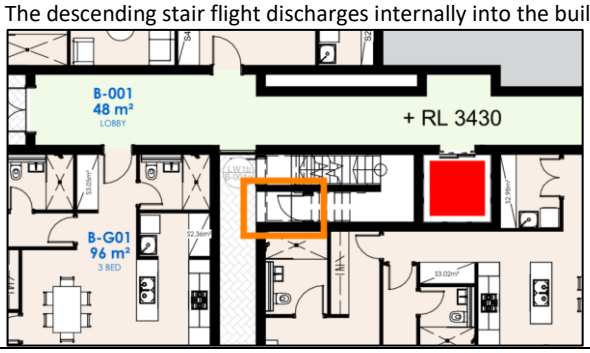
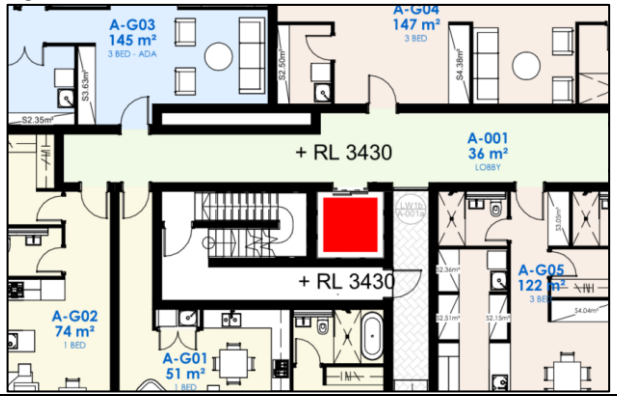
Following our detailed assessment of the documentation referenced in Appendix A, a summarised list of non-compliances are listed in the table below. There are various compliance pathways to achieve compliance with the Performance Requirements of the BCA. Our suggested resolution approach is provided against each non-compliance for consideration.

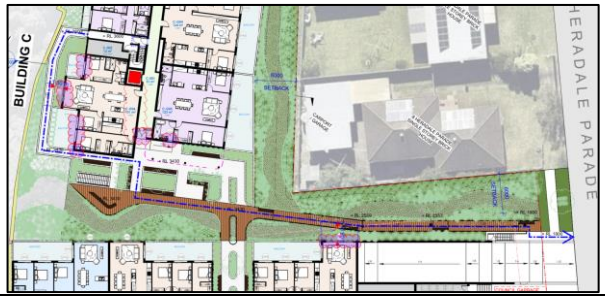
Item No.	Description of BCA non-compliance	Non-compliance BCA Clause / Performance Requirement	Suggested resolution approach
1.	The exit travel distances for each of the required exits in each tower and class in the building	D2D5	A performance solution will be provided by a fire safety engineer to address the extended travel distances identified below: **Basement:** **(1)** Travel distance to the point of choice is measured up to 28m.   **Building B:** **(1)** Travel distance on the residential levels up to 12.2m in lieu of 12m to the exit from the following units: a. Level 1 - Unit B-104

			 b. Level 2 – Unit B-204  **Building C:** **(1)** Extended Travel distances measured up to 13.2m in lieu of 12m to the exit from the following units: a. Level 1 – Unit C-102  **(2)** Travel distance up to 13.2m in lieu of 12m to the exit from the following units: a. Level 1 – C-102

			 **(3)** Travel distance up to 13.3m in lieu of 12m to the exit from the following units: b. Level 2 – C-202  **(4)** Travel distance on Level 2 pool maintenance room up to 38.1m in lieu of 20m to the exit:

			 **(5)** Travel distance on Level 3 pool up to 37.2m in lieu of 20m to the exit: 
2.	Travel via the fire-isolated exits	D2D12(2)&(3)	A performance solution by a fire safety engineer is required to address the following: The path of travel from the point of discharge of the fire-isolated stairway necessitates passing with 6m of the unprotected openings in the external wall of the building.

			 
3.	Travel via the fire-isolated exits	D2D12(2)&(3)	A performance solution by a fire safety engineer is required to address the following: **Building B:** The descending stair flight discharges internally into the building. 
4.	Separation of rising and descending stair flights	D3D5	A performance solution by a fire safety engineer is required to address the following: **Building A:** There is a direct connection between the rising and descending stair flights. 

5.	Roof as open space	D3D13	A performance solution by a fire safety engineer is required to address the following: **Building C:** There are openings within 3m of the path of travel of persons using the fire-isolated exit to reach the road. 

The documentation relied upon to prepare this report is continuously being modified. By action in resolving the noted non-compliances and consideration of our recommendations in this report, the proposed development is capable of complying with the Building Code of Australia 2022.

Contents

Revision History

Revision No.	Date	Details	Authorised	
			Prepared by	Reviewed by
R01	01 December 2022	Preliminary Review	MW	RA
R02	17 January 2023	DA Stage Report	MW	RA
R03	27 March 2023	Final Report	MW	RA
R04	24 November 2023	BCA 2022 Report	MW	RA
R05	03 September 2024	BCA 2022 Report	JA	RA

AllCert Report Ref: 220192 Heradale Pde, Batemans Bay

2.0 INTRODUCTION

2.1 Purpose of report

AllCert Pty Ltd have been commissioned by Place Studio to provide professional building code regulation advice relating to the design of the proposed development located at 20 Heradale Pde, Batemans Bay. The residential development consists of one (1) residential building consisting of three residential towers over a common basement.

Figure 1. Overall site plan

The report presents the findings of a detailed assessment undertaken by AllCert Pty Ltd against the deemed-to-satisfy (DtS) provisions of the Building Code of Australia (BCA) 2022. The report identifies all non-compliances and provides recommendations to appropriately resolve the compliance departure.

2.2 Reporting team

The information and findings presented within this report was prepared by the following key personnel from AllCert:

- Roland Allam (BDC3372)
- Michael Watson
- Jason Azzi

2.3 Description of development

The proposed development located at 20 Heradale Pde, Batemans Bay. The proposed development includes the proposed residential development comprising of 60 sole-occupancy units with a common area gymnasium, swimming pool and basement carpark.

The proposed development, the subject of this report, is described as follows:

Building Use / Classification(s)	Basement	Class 7a
	Ground Level	Class 2 (residential)
	Level 1	Class 2 (residential)
	Level 2	Class 2
	Level 3	Class 2
Overall storeys contained	5	
Rise in Storeys	5	
Type of Construction	Type A Construction	
Effective Height (m)	~13.53m	
General floor area and volume limitations for Type A Construction	Within the limitations for Type A Construction.	
Climate Zone	Climate Zone 6 - mild temperate.	

The potential fire source features along the perimeter of the building are –

- Northern Boundary – Residential dwellings
- Southern Boundary – Bavarde Ave
- Eastern Boundary – Residential Developments and Heradale Parade
- Western Boundary – Residential development and Vegetation

Note: *The BCA defines "fire source feature" as –*

a) the far boundary of a road, river, lake or the like adjoining the allotment; or
b) a side or rear boundary of the allotment; or
c) an external wall of another building on the allotment which is not a Class 10 building.

2.4 Design documentation

The report has been prepared based on the documentation listed in Appendix A, and information provided by the client. The information provided by the client is intended for their use only, and it is in the opinion of this office that the documentation provided sufficient information to allow a detailed BCA report to be produced.

2.5 Scope and limitations

The report covers every relevant clause identified under Section B – Structure, Section C – Fire resistance, Section D – Access and egress, Section E – Services and equipment, Section F – Health and amenity, Section G – Ancillary provisions, Section H – Special use buildings, Section J Energy Efficiency and the additional NSW provisions/requirements. Where the BCA provides no deemed-to-satisfy provision, AllCert have suggested appropriate compliance pathways to meet the relevant performance requirements of the BCA.

This report does not include nor implies any detailed assessment of the building with respect to structural engineering or engineering services, material fire resistance levels or compliance with any Australian Standards. Therefore, the following are excluded from this assessment:

- the structural adequacy or design of the building;
- the fire-resistance ratings of any structural elements of the building, unless specifically referred to;
- the design basis and/or operating capabilities of electrical, mechanical, hydraulic, fire services and fire protection services;
- the National Construction Code Volume 3 – Plumbing Code of Australia;

- Australian Standards not referenced in the deemed-to-satisfy provisions or Schedule 4 of the BCA;
- Disability Discrimination Act 1992 including the Disability (Access to Premises – Buildings) Standards 2010;
- requirements of other regulatory authorities and utilities including, but not limited to, Telstra and the like communications authority, Gas Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Local Council, ARTC, Department of Planning and the like;
- any existing conditions of Development Consent issued by the Consent Authority;
- consideration of Councils local and development control plans;
- heritage significance;
- assessment of slip-resistance ratings for all accessible paths of travel, except where called upon in the deemed-to-satisfy provisions of the BCA;
- the National Construction Code Volume 2

This report is for the exclusive use of the client and cannot be used for any other purpose without prior permission from AllCert Pty Ltd. The report is valid only in its entire form. 'AllCert accepts no responsibility for any loss suffered as a result of any reliance upon such assessment or report other than as being accurate at the date the report was issued'.

3.0 BUILDING REGULATION ASSESSMENT

The following relevant sections of the Building Code of Australia 2022 apply to the building:

3.1 Section B – Structure

The structural components of the building must comply with the relevant requirements of the BCA and the applicable Australian Standards referenced in Schedule 5 of the BCA 2022. The structural engineering components have not been part of this assessment. Whilst the loadbearing building is to be predominately comprised of reinforced and post-tensioned concrete, the buildings structure is to be designed and certified by the engineer as complying with all relevant parts of Section B of the Building Code of Australia 2022 and adopted Australian Standards.

The design must take into consideration all relevant requirements of AS1170.4, particularly earthquake loads to be considered in the design of the building as well as resisting horizontal and vertical earthquake forces to certain non-structural building parts and components.

Compliance should be benchmarked against, but not limited to, the following as appropriate:

B1D2 Resistance to actions

The resistance of a building or structure must be greater than the most critical action effect resulting from different combinations of actions, where—

(a) the most critical action effect on a building or structure is determined in accordance with B1D3 and the general design procedures contained in AS/NZS 1170.0; and

(b) the resistance of a building or structure is determined in accordance with B1D4.

B1D3 Determination of individual actions

The magnitude of individual actions must be determined in accordance with the following:

(a) Permanent actions:
- (i) the design or known dimensions of the building or structure; and
- (ii) the unit weight of the construction; and
- (iii) AS/NZS 1170.1.
- (iv) for a Class 7b building, a notional additional permanent roof load of not less than 0.15 kPa to support the addition of solar photovoltaic panels.

(b) Imposed actions:
- (i) the known loads that will be imposed during the occupation or use of the building or structure; and
- (ii) construction activity actions; and
- (iii) AS/NZS 1170.1.

(c) Wind, snow and ice and earthquake actions:
- (i) the applicable annual probability of design event for safety, determined by—
  - (A) assigning the building or structure an Importance Level in accordance with Table B1D3a; and
  - (B) determining the corresponding annual probability of exceedance in accordance with Table B1D3b; and
- (ii) AS/NZS 1170.2; and
- (iii) AS/NZS 1170.3 as appropriate; and
- (iv) AS 1170.4 as appropriate; and
- (v) in cyclonic areas, metal roof cladding, its connections and immediate supporting members must comply with Specification 4; and
- (vi) for the purposes of (v), cyclonic areas are those determined as being located in wind regions C and D in accordance with AS/NZS 1170.2.

(d) Actions not covered in (a), (b) and (c) above:
- (i) the nature of the action; and
- (ii) the nature of the building or structure; and
- (iii) the Importance Level of the building or structure determined in accordance with Table B1D3a; and
- (iv) AS/NZS 1170.1.

(e) For the purposes of (d) the actions include but are not limited to –
- (i) liquid pressure action; and
- (ii) ground water action; and
- (iii) rainwater action (including ponding action); and
- (iv) earth pressure action; and
- (v) differential movement; and
- (vi) time dependent effects (including creep and shrinkage); and
- (vii) thermal effects; and
- (viii) ground movement caused by—

(A) swelling, shrinkage or freezing of the subsoil; and
(B) landslip or subsidence; and
(C) siteworks associated with the building or structure; and

(ix) construction activity actions.

Exemptions

B1D3(a)(iv) does not apply to a Class 7b building—

(a) where 100% of the roof area is shaded for more than 70% of daylight hours; or
(b) with a roof area of not more than 55m2; or
(c) where more than 50% of the roof area is used as a terrace, carpark, roof garden, roof light or the like.

The importance level of the building is to be determined in accordance with Table B1D3a of the BCA by the Structural Engineer.

B1D4 Determination of structural resistance of materials and forms of construction;

The structural resistance of materials and forms of construction must be determined in accordance with the following, as appropriate:

(a) Masonry (including masonry-veneer, unreinforced masonry and reinforced masonry): AS 3700-2018, except—
  (i) '(for piers – isolated or engaged)' is removed from Clause 8.5.1(d) of AS3700-2018; and
  (ii) where Clause 8.5.1 requires design as for unreinforced masonry in accordance with Section 7, the member must also be designed as unreinforced masonry in accordance with Tables 10.3 and 4.1(a)(i)(C) of AS3700-2018.
(b) Concrete:
  (i) Concrete construction (including reinforced and prestressed concrete): AS 3600-2018.
  (ii) Autoclaved aerated concrete: AS5146.1 and AS 5146.3.
  (iii) Post-installed and cast-in fastenings: AS5216.
(c) Steel construction:
  (i) Steel structures: AS 4100.
  (ii) Cold-formed steel structures: AS/NZS 4600.
  (iii) Residential and low-rise steel framing: NASH Standard – Residential and Low-Rise Steel Framing Part 1 or Part 2.
(d) Composite steel and concrete: AS/NZS 2327.
(e) Aluminium construction: AS/NZS 1664.1 or AS/NZS 1664.2.
(f) Timber construction:
  (i) Design of timber structures: AS 1720.1.
  (ii) Timber structures: AS1684.2, AS1684.3 or AS1684.4.
  (iii) Nail plated timber roof trusses: AS1720.5.
(g) Piling: AS 2159.
(h) Glazed assemblies:
  (i) The following glazed assemblies in an external wall must comply with AS2047:
    (A) Windows excluding those listed in (ii).
    (B) Sliding and swinging glazed doors with a frame, including french and bi-fold doors with a frame.
    (C) Adjustable louvres.
    (D) Shopfronts.
    (E) Window walls with one piece framing.
  (ii) All glazed assemblies not covered by (i) and the following glazed assemblies must comply with AS 1288:
    (A) All glazed assemblies not in an external wall.
    (B) Revolving doors.
    (C) Fixed louvres.
    (D) Skylights, roof lights and windows in other than the vertical plane.
    (E) Sliding and swinging doors without a frame.
    (F) Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047.
    (G) Second-hand windows, re-used windows and recycled windows.
    (H) Heritage windows.
    (I) Glazing used in balustrades and sloping overhead glazing.
(i) Termite Risk Management: Where a primary building element is subject to attack by subterranean termites: AS 3660.1, and
  (i) for the purposes of this provision, a primary building element consisting entirely of, or a combination of, any of the following materials is considered not subject to termite attack:
    (A) Steel, aluminium or other metals.
    (B) Concrete.
    (C) Masonry.
    (D) Fibre-reinforced cement.

(E) Timber — naturally termite resistant in accordance with Appendix C of AS 3660.1.
(F) Timber — preservative treated in accordance with Appendix D of AS 3660.1; and

(ii) a durable notice must be permanently fixed to the building in a prominent location, such as a meter box or the like, indicating—
(A) the termite management system used; and
(B) the date of installation of the system; and
(C) where a chemical is used, its life expectancy as listed on the appropriate authority's pesticides register label; and
(D) the installer's or manufacturer's recommendations for the scope and frequency of future inspections for termite activity.

(j) Roof construction (except in cyclonic areas):
(i) Terracotta, fibre-cement and timber slates and shingles: AS 4597.
(ii) Roof tiling: AS 2050.
(iii) Cellulose cement corrugated sheets: AS/NZS 2908.1 with safety mesh installed in accordance with AS1562.3 clause 2.4.3.2 except for sub-clause (c)(vii) or plastic sheeting.
(iv) Metal roofing: AS 1562.1.

(k) Particleboard structural flooring: AS 1860.2.

(l) Garage doors and other large access doors in openings not more than 3 m in height in external walls of buildings determined as being located in wind region C or D in accordance with AS/NZS 1170.2: AS/NZS 4505.

(m) Lift shafts which are not required to have an FRL, must
(i) except as required by (ii), be completely enclosed with non-perforated material between the bottom of the pit and the ceiling of the lift shaft, other than—
(A) at landing doors, emergency doors and pit access doors; and
(B) low-rise, low-speed constant pressure lifts; and
(C) small-sized, low speed automatic lifts; and
(ii) in atrium and observation areas, be protected with non-perforated material not less than 2.5 m in height—
(A) above any places on which a person can stand, which are within 800 mm horizontal reach of any vertical moving lift component including ropes and counterweights; and
(B) at the lowest level of the atrium area that the lift serves, on all sides except the door opening, for not less than 2.5 m in height, by enclosure with non-perforated material; and
(iii) be of non-brittle material; and
(iv) where glazing is used –
(A) comply with Table B1D4; or
(B) not fail the deflection criteria required by S6C11(c)(iii).

B1D6 Construction of buildings in flood hazard areas

The development site is deemed to not be in a flood hazard area according to the ePlanning Spatial Viewer.

3.2 Section C – Fire Resistance

Part C2 Fire Resistance and Stability

Clause		Design requirement	Compliance review
C2D2	Type of construction required	The minimum type of fire-resisting construction of a building must be determined in accordance with Table C2D2. Each building element must comply with Specification 5 as applicable.	The building will have a rise in storeys of 5 and the minimum type of fire-resisting construction required is of type A construction.
C2D3	Calculation of rise in storeys.	The rise in storeys is the sum of the greatest number of storeys at any part of the external walls of the building and any storeys within the roof space— (a) above the finished ground next to that part; or (b) if part of the external wall is on the boundary of the allotment, above the natural ground level at the relevant part of the boundary.	
C2D4	Buildings of multiple classification	In a building of multiple classifications, the Type of construction required for the building is the most fire-resisting Type resulting from the application of Table C2D2 on the basis that the classification applying to the top storey applies to all storeys.	Informational clause. The building is considered a Class 2 building of type A construction.
C2D5	Mixed types of construction	A building may be of mixed Types of construction where it is separated in accordance with C3D8 and the Type of construction is determined in accordance with C2D2 or C2D4.	Not applicable – the building will be constructed of Type A Construction.
C2D6	Two storey Class 2, 3 or 9c building	Not applicable.	Not applicable.
C2D7	Class 4 parts of buildings	Not applicable.	Not applicable.
C2D8	Open spectator stands and indoor sports stadiums	Not applicable.	Not applicable.

Clause		Design requirement	Compliance review
C2D9	Lightweight construction	Lightweight construction must comply with specification 6 if it is used in a wall system – (a) that is required to have an FRL; or (b) for a lift shaft, stair shaft or service shaft or an external wall bounding a public corridor including a non-fire isolated passageway or non-fire isolated ramp, in a spectator stand, sports stadium, cinema or theatre, railway station, bus station or airport terminal. If lightweight construction is used for the fire-resisting covering of a steel column or the like, and if – (a) the covering is not in continuous contact with the column, then the void must be filled solid, to a height of not less than 1.2 m above the floor to prevent indenting; and (b) the column is liable to be damaged from the movement of vehicles, materials or equipment, then the covering must be protected by steel or other suitable material.	**Capable of Compliance:** Where lightweight construction is proposed, details of the construction materials are required to be provided to verify compliance. At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
C2D10	Non-combustible building elements	In a building required to be of Type A construction, the following building elements and their components must be non-combustible: (a) External walls and common walls, including all components incorporated in them including the façade covering, framing and insulation. (b) The floor and floor framing of lift pits. (c) Non-loadbearing internal walls where they are required to be fire-resisting. In a building mandated to be of Type A Construction, any non-loadbearing shaft, such as a lift, ventilating, pipe, or garbage shaft, which does not handle the discharge of hot products of combustion, must be constructed using non-combustible materials. This clause contains provisions for combustible materials that may be used wherever a non-combustible material is required under the BCA, including: ▪ Combustible elements permitted within the external wall under C2D10(4). ▪ Materials, where comprised entirely of itself, which are deemed non-combustible under C2D10(5). ▪ Materials which are permitted for use where non-combustible materials are required under C2D10(6).	**Capable of Compliance:** Documentation is to be provided as relevant to: ▪ The details of any external wall cladding (including the method of attachment and all components comprising the external wall system) ▪ Any framing or integral formwork systems (such as timber framing or sacrificial formwork) ▪ Any external linings or trims (like external UPVC window linings or timber window blades) ▪ Any sarking or insulation within the wall assembly. At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

Clause		Design requirement	Compliance review
C2D11	Fire hazard properties	The fire hazard properties of the outlined linings, materials and assemblies in a Class 2 to 9 building must comply with Specification 7. Refer below to extracts from Tables S7C3 and S7C4 of Spec 7. as relevant to wall, floor, and ceiling linings. For additional detailed requirements relating to additional building elements, refer to the relevant clause of Spec 7. as outlined below: ▪ Floor linings and coverings – S7C3 ▪ Wall linings and ceiling linings – S7C4 ▪ Air-handling ductwork – S7C5. ▪ Lift Cars – S7C6. ▪ Fire control rooms and fire-isolated exits – S7C7 ▪ Fixed seating and proscenium curtains in Class 9b theatres, public halls and the like – S7C7 ▪ Escalators, moving walkways, and non-required non-fire-isolated stairways and ramps – S7C7. ▪ Sarking-type materials – S7C7. ▪ Attachments to internal floors, walls, and ceilings – S7C7. ▪ Other materials – S7C7 NSW Variations: The following additional linings, materials, and assemblies must comply with Specification 7: ▪ An entertainment venue, a material used to cover closed back upholstered seats; and ▪ A public hall or the like, a proscenium curtain required by Specification 32.	**Capable of Compliance:** The wall and ceiling lining of the building is required to have a Group Number of 1, 2 or 3 tested in accordance with AS5637.1. At this stage, there are no test details available to verify compliance in this instance. It is recommended that test reports verifying the Fire Hazard Properties of various linings, materials, assemblies, and coverings be submitted to this office for compliance check during the next stage of the design development phase. At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
C2D12	Performance of external walls in fire	Not applicable	Not applicable
C2D13	Fire-protected timber: Concession	Not applicable	Not applicable – *confirmation has been provided that the development will not consist of fire-protected timber.*
C2D14	Ancillary Elements	No ancillary element should be fixed, installed, or attached to the internal parts or external face of an external wall unless it falls into one of the following categories: ▪ An ancillary element that is non-combustible. ▪ A gutter, downpipe, or other plumbing fixture or fitting.	**Capable of Compliance:** The details of the ancillary elements have not been included in the plans assessed at this stage. At the Construction Certificate

Clause		Design requirement	Compliance review

		▪ A flashing.
		▪ A grate, grille, or similar cover not exceeding 2 m2 in area and associated with a building service.
		▪ An electrical switch, socket-outlet, cover plate, or similar component.
		▪ A light fitting.
		▪ A required sign.
		▪ A sign, meeting the following criteria:
		  ▪ Achieves a group number of 1 or 2.
		  ▪ Does not extend beyond one storey.
		  ▪ Does not extend beyond one fire compartment.
		  ▪ Is separated vertically from other signs permitted under (h) by at least 2 storeys.
		▪ An awning, sunshade, canopy, blind, or shading hood, meeting the following criteria:
		  ▪ Complies with the relevant requirements of Table S7C7 as an internal element.
		  ▪ Serves a storey:
		  ▪ At ground level.
		  ▪ Immediately above a storey at ground level.
		  ▪ Does not serve an exit in a way that would render the exit unusable in a fire.
		▪ A component of a security, intercom, or announcement system.
		▪ Wiring.
		▪ Waterproofing material, installed in accordance with AS 4654.2, applied to an adjacent floor surface (including vertical upturn) or a roof surface.
		▪ Collars, sleeves, and insulation associated with service installations.
		▪ Screens applied to vents, weepholes, and gaps, complying with AS 3959.
		▪ Wiper and brush seals associated with doors, windows, or other openings.
		▪ A gasket, caulking, sealant, or adhesive directly associated with (a) to (o).
			stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

C2D15	Fixing of bonded laminated cladding panels	(1) In a building required to be of Type A or B construction, externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame. (2) An externally located bonded laminated cladding panel need not comply with (1) if it is one of the following: a) A laminated glass system. b) Layered plasterboard product.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

Clause	Design requirement	Compliance review
	c) Perforated gypsum lath with a normal paper finish. d) Fibrous-plaster sheet. e) Fibre-reinforced cement sheeting.	

Part C3 Compartmentation and Separation

Clause		Design requirement	Compliance review
C3D2	Application of Part	Clauses C3D3, C3D4 and C3D5 do not apply to a carpark provided with a sprinkler system (other than FPAA101D or FPAA101H system) complying with Specification 17, an open-deck carpark or an open spectator stand. Clause C3D13(1)(e) does not apply to a Class 8 electricity network substation.	Noted.
C3D3	General floor area and volume limitations	The building is of **type A** construction. Refer to comments in Clause C2D2 of this report. i. The size of any fire compartment or atrium in a Class 5, 6, 7, 8 or 9 building must not exceed the relevant maximum floor area nor the relevant maximum volume set out in Table C3D3 and C3D6 except as permitted in C3D4. ii. A part of a building which contains only heating ventilating or lift equipment, water tanks, or similar service units is not counted in the floor area or volume of a fire compartment or atrium if it is situated at the top of the building.	*Complies.*
C3D4	Large isolated buildings	Not applicable	Not applicable
C3D5	Requirements for open spaces and vehicular access	Not applicable	Not applicable.
C3D6	Class 9a and 9c buildings	Not applicable	Not applicable
C3D7	Vertical separation of openings in external walls	Not applicable.	Confirmation has been provided to our office confirming that the proposed development will be protected with a sprinkler system complying with AS2118.1-2017 or AS2118.4-2012. Therefore, the requirements of this clause are not applicable.
C3D8	Separation by fire walls	(1) **Construction** — A fire wall must be constructed in accordance with the following: a. The fire wall has the relevant FRL prescribed by Specification 5 for each of the adjoining parts, and if these are different, the greater FRL, except where S5C19(3)(c)(i), S5C22(3)(c)(i) and S5C25(3)(c)(i) permit a lower FRL on the carpark side. b. Any openings in a fire wall must not reduce the FRL required by Specification 5 for the fire wall, except where permitted by the DtS Provisions of Part C4. c. Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not pass through or cross the fire	At this stage of the design, there is no fire wall shown on the plans. However, as the design progresses, fire wall ratings and details will be required for compliance with this clause. All sole occupancy units (SOUs) will need to have fire resistance levels (FRLs) detailed in accordance with Spec. 5.

Clause		Design requirement	Compliance review
		wall unless the required fire-resisting performance of the fire wall is maintained. (2) **Separation of buildings** — A part of a building separated from the remainder of the building by a fire wall may be treated as a separate building for the purposes of the DtS Provisions of Sections C, D and E if it is constructed in accordance with (1) and the following: a. The fire wall extends through all storeys and spaces in the nature of storeys that are common to that part and any adjoining part of the building. b. The fire wall is carried through to the underside of the roof covering. c. Where the roof of one of the adjoining parts is lower than the roof of the other part, the fire wall extends to the underside of— i. the covering of the higher roof, or not less than 6 m above the covering of the lower roof; or ii. the lower roof if it has an FRL not less than that of the fire wall and no openings closer than 3 m to any wall above the lower roof; or iii. the lower roof if its covering is non-combustible and the lower part has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. (3) **Separation of fire compartments** — A part of a building separated from the remainder of the building by a fire wall may be treated as a separate fire compartment if it is constructed in accordance with (a) and the fire wall extends to the underside of— a. a floor having an FRL required for a fire wall; or b. the roof covering.	
C3D9	Separation of classifications in the same storey	(1) If a building has parts of different classifications located alongside one another in the same storey— a) each building element in that storey must have the higher FRL prescribed in Specification 5 for that element for the classifications concerned; or b) the parts must be separated in that storey by a fire wall. (2) A fire wall required by (1)(b) must have the FRL prescribed in accordance with Specification 5 as applicable for that element for the Type of construction and the classifications concerned. (3) For the purposes of (2), the FRL in Specification 5 must be either— (a) the higher FRL prescribed in Table S5C11d or S5C21d; or (b) the FRL prescribed in Table S5C24c. (1) (4) For the purposes of (1), where one part is a carpark complying with S5C19, S5C22 or S5C25, the parts may be separated by a fire wall complying with S5C19(3)(c), S5C22(3)(c) or S5C25(3)(c) as appropriate.	Not applicable at this stage. Refer to comments in Clause C3D8.

Clause		Design requirement	Compliance review
C3D10	Separation of classifications in different storeys	If parts of different classification are situated one above the other in adjoining storeys they must be separated as follows: (a) Type A construction — The floor between the adjoining parts must have an FRL of not less than that prescribed in Specification 5 for the classification of the lower storey. (b) Type B or C construction — If one of the adjoining parts is of Class 2, 3 or 4, the floor separating the part from the storey below must— (i) be a floor/ceiling system incorporating a ceiling which has a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or (ii) have an FRL of at least 30/30/30; or (iii) have a fire-protective covering on the underside of the floor, including beams incorporated in it, if the floor is combustible or of metal.	**Capable of Compliance:** This development will be constructed of Type A construction. According to the requirements of this clause, Spec. 5, and Clause D3D13, the floor between the Basement and Ground levels is required to achieve a fire resistance level (FRL) of not less than 120/120/120. At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
C3D11	Separation of lift shafts	(1) Any lift connecting more than 2 storeys, or more than 3 storeys if the building is sprinklered, (other than lifts which are wholly within an atrium) must be separated from the remainder of the building by enclosure in a shaft in which— (c) in a building required to be of Type A construction — the walls have the relevant FRL prescribed by Specification 5; and (a) in a building required to be of Type B construction — the walls— (i) if loadbearing, have the relevant FRL prescribed by Table S5C21e; or (ii) if non-loadbearing, be of non-combustible construction. (2) Any lift in a patient care area in a Class 9a health-care building or a resident use area in Class 9c building must be separated from the remainder of the building by a shaft having an FRL of not less than— (a) in a building of Type A or B construction — 120/120/120; or (b) in a building of Type C construction — 60/60/60. (3) An emergency lift must be contained within a fire-resisting shaft having an FRL of not less than 120/120/120. a) Openings for lift landing doors and services must be protected in accordance with the DtS Provisions of Part C4.	**Capable of Compliance:** The lift shafts throughout the building are required to comply with Specification 5 for Type A Construction. According to specification 5, the lift shafts if loadbearing are required to have an FRL of not less than 120/120/120 and if non-loadbearing is required to have an FRL of --/120/120. At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
C3D12	Stairways and lifts in one shaft	A stairway and lift must not be in the same shaft if either the stairway or the lift is required to be in a fire-resisting shaft.	Not applicable

Clause		Design requirement	Compliance review
C3D13	Separation of equipment.	Equipment as listed below must be separated from the remainder of the building with construction that achieves an FRL of 120/120/120 (or that required by Spec 5, whichever is greater) and doorways being self-closing -/120/30 fire doors: ▪ Lift motors and lift control panels; or ▪ Emergency generators used to sustain emergency equipment operating in the emergency mode; or ▪ Central smoke control plant; or ▪ Boilers; or ▪ A battery or batteries installed in the building that have a voltage exceeding 12 volts and a capacity exceeding 200kWh. Separation of on-site fire pumps must comply with the requirements of AS2419.1.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
C3D14	Electrical supply system	An electrical substation located within a building or a main switchroom which sustains emergency equipment, must: (1) Be separated from the building by construction achieving an FRL of 120/120/120; and (2) Have any doorway protected with a self-closing fire door achieving an FRL of -/120/30. Electrical conductors within a building must be protected in accordance with sub-clause (3).	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
C3D15	Public corridors in class 2 and 3 buildings	In a Class 2 or 3 building, a public corridor, if more than 40 m in length, must be divided at intervals of not more than 40m with smoke-proof walls complying with S11C2.	Complies.

Part C4 Protection of Openings

Clause		Design requirement	Compliance review
C4D3	Protection of openings in external walls	a) Subject to (2), openings in an external wall that is required to have an FRL must be protected in accordance with C4D5, and if wall-wetting sprinklers are used, they must be located externally. b) The requirements of (1) only apply if the distance between the opening and the fire-source feature to which it is exposed is less than— (a) 3 m from a side or rear boundary of the allotment; or (b) 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or (c) 6 m from another building on the allotment that is not Class 10. (1) Openings required to be protected under (1), must not occupy more than 1/3 of the area of the external wall of the storey in which they are located unless they are in a Class 9b building used as an open spectator stand.	Complies.
C4D4	Separation of external walls and associated openings in different fire compartments	The distance between parts of external walls and any openings within them in different fire compartments separated by a fire wall must not be less than that set out in Table C4D4, unless— b) those parts of each wall have an FRL not less than 60/60/60; and any openings protected in accordance with C4D5.	Complies.
C4D5	Acceptable methods of protection	(1) Where protection is required, doorways, windows and other openings must be protected as follows: ***(a) Doorways—*** (i) internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or (ii) –/60/30 fire doors that are self-closing or automatic closing. ***(b) Windows—*** (i) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or (ii) –/60/– fire windows that are automatic closing or permanently fixed in the closed position; or (iii) –/60/– automatic closing fire shutters. ***(c) Other openings—***	Noted and to be detailed for compliance at the Construction Certificate stage.

Clause		Design requirement	Compliance review
		(i) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or (ii) construction having an FRL not less than –/60/–. Fire doors, fire windows and fire shutters must comply with Specification 12.	
C4D6	Doorways in firewalls	Not applicable.	Not applicable.
C4D7	Sliding fire doors	Not applicable.	Not applicable.
C4D8	Protection of doorways in horizontal exits	Not applicable.	Not applicable.
C4D9	Openings in fire-isolated exits	(1) Doorways that open to fire-isolated stairways, fire-isolated passageways or fire-isolated ramps, and are not doorways opening to a road or open space, must be protected by –/60/30 fire doors that are self-closing, or automatic-closing in accordance with (2) and (3). (2) The automatic-closing operation by (1) must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located not more than 1.5 m horizontal distance from the approach side of the doorway. (3) Where any other suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification 17, is installed in the building, activation of the system must also initiate the automatic-closing operation. A window in an external wall of a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp must be protected in accordance with C4D5 if it is within 6 m of, and exposed to, a window or other opening in a wall of the same building, other than in the same fire-isolated enclosure.	**Capable of Compliance:** All doorways to fire-isolated exits, except those that open to a road or open space, must be protected by self-closing fire doors with a FRL of not less than -/60/30. At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
C4D10	Service penetrations in fire-isolated exits	Fire-isolated exits must not be penetrated by any services other than— 1. electrical wiring permitted by D3D8(6) to be installed within the exit; or 2. ducting associated with a pressurisation system if it— 1. is constructed of material having an FRL of not less than –/120/60 where it passes through any other part of the building; and 2. does not open into any other part of the building; or 3. for fire services, water supply and test drain pipes.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

Clause		Design requirement	Compliance review
C4D11	Openings in fire-isolated lift shafts	(1) **Doorways –** If a lift shaft is required to be fire-isolated, an entrance doorway to that shaft must be protected by –/60/– fire doors that: (a) comply with AS 1735.11; and (b) are set to remain closed except when discharging or receiving passengers, goods or vehicles. **Lift indicator panels** — A lift call panel, indicator panel or other panel in the wall of a fire-isolated lift shaft must be backed by construction having an FRL of not less than –/60/60 if it exceeds 35 000 mm^2 in area.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
C4D12	Bounding construction: Class 2 and 3 buildings and Class 4 parts	This clause states that in Class 2 or 3 buildings, doorways providing access from a sole-occupancy unit to public spaces, other rooms, non-fire isolated stairway landings, or other sole-occupancy units must be protected with a self-closing --/60/30 fire door. Additionally, all other openings in internal walls must not reduce the fire-resistance performance of the wall. In Class 2 or 3 buildings, if a path of travel to an exit is along an open balcony, landing or the like, and passes an external wall of another sole-occupancy unit or a room not within a sole-occupancy unit, the external wall must be constructed of concrete or masonry or lined internally with a fire-protective covering, and have any doorways, windows, or other openings protected with a self-closing solid core door and protected internally in accordance with C4D5 or located at least 1.5m above the floor of the balcony, landing or the like.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
C4D13	Openings in floors and ceilings for services	This clause states that services, such as pipes and ducts, that pass through a floor or ceiling that is required to have a fire-resistance rating (FRL) must be protected in a specific way. For buildings of Type A construction, the services must be protected by a shaft that complies with Specification 5. For buildings of Type B or C construction, the services must be protected by a shaft that does not reduce the fire performance of the building elements it penetrates. Additionally, if a service passes through a floor that is required to be protected by a fire-protective covering, the penetration must not reduce the fire performance of the covering.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
C4D14	Openings in shafts	An opening in a wall providing access to a ventilating, pipe, garbage or other service shaft in a Type A construction building must be protected by a non-combustible door	Noted and further details of opening are required to compliance to be achieved.

Clause		Design requirement	Compliance review
		or panel with an FRL of not less than –/30/30 if in a sanitary compartment, a self-closing –/60/30 fire door or hopper, an access panel with an FRL of not less than –/60/30, or if the shaft is a garbage shaft, a non-combustible door or hopper.	
C4D15	Openings for service installations	This clause states that when an electrical, electronic, plumbing, mechanical ventilation, air-conditioning or other service penetrates a building element (other than an external wall or roof) that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, the installation must comply with one of the following: (a) Tested systems, where the service, building element and any protection method at the penetration must be identical to a prototype assembly that has been tested in accordance with specific standards and achieved the required FRL or resistance to the incipient spread of fire, with some exceptions for insulation criteria or if the service is a pipe system made entirely of metal and meets certain distance and location criteria, or (b) Ventilation and air-conditioning where the installation must be in accordance with specific standards.	**Capable of Compliance** To achieve compliance, the design documentation must provide detailed information on how service penetrations are being protected.
C4D16	Construction Joints	Construction joints, spaces, and similar areas in and between building elements that are required to be fire-resistant with respect to integrity and insulation must be protected in a way that is identical to a prototype that has been tested in accordance with AS 1530.4 to achieve the required FRL. This clause does not apply when joints, spaces, and similar areas between fire-protected timber elements are provided with cavity barriers in accordance with Specification 9.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause. Advice from a waterproofing consultant will be required particularly for the construction joints and external waterproofing detail to roof areas.
C4D17	Columns protected with lightweight construction to achieve an FRL	A column that passes through a fire-rated building element and is protected with lightweight construction to achieve an FRL, must use the same method and materials as a prototype that has achieved the required FRL or resistance to the incipient spread of fire.	Noted and further details of columns are required to compliance to be achieved.

Specification 5 - Fire-Resisting Construction

Clause		Design requirement	Compliance review
Spec. 5	Fire-resistance of building elements	This clause states that in a building required to be of Type A construction, each building element listed in Tables S5C11a, S5C11b, S5C11c, S5C11d, S5C11e, S5C11f, S5C11g and any beam or column incorporated in it, must have an FRL not less than that listed in the Table for the particular Class of building concerned. It also states that any internal wall required to have an FRL with respect to integrity and insulation must extend to the underside of the floor above it, the underside of a roof that complies with Tables, S5C11d, S5C11e, S5C11f, S5C11g, the underside of a non-combustible roof covering if the roof is not required to comply with Table S5C11g . The note specifies that the concession is not applicable to roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material and they must not be crossed by timber or other combustible building elements. It also specifies that a loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft) must be constructed from concrete, masonry or fire-protected timber and the FRLs specified in Table S5C11c for an external column apply also to those parts of an internal column that face and are within 1.5 m of a window and are exposed through that window to a fire-source feature.	**1.** **Capable of Compliance:** The design documentation must clearly show the details of the walls including their Fire Resistance Level (FRL) and that they extend to the floor above and the roof above as required by Table S5C11a, S5C11b, S5C11c, S5C11d, S5C11e, S5C11f, S5C11g of the relevant building code or standard. **2.** **Further Information Required** Details of the separation of the bounding walls at the external walls are required at CC stage to assess compliance with the requirements of Specification 5. **3.** **Further Information Required** Details are to be provided at CC stage of any wet are step-downs proposed to asses compliance with the requirements of Specification 5. **4.** **Further Information Required** Details are to be provided at CC stage of the separation at the perimeter slab edge to asses compliance with the requirements of Specification 5.

Summary of Specification 5

Type A Construction: FRL of Building Elements

The fundamental concept of fire rating for the building is as per the following tables for Type A Construction

Table S5C11a Type A Construction: FRL of loadbearing parts of external walls

Distance from the fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
less than 1.5 m	90/ 90/ 90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/ 60/ 60	120/ 90/ 90	180/180/120	240/240/180
3 m or more	90/ 60/ 30	120/ 60/ 30	180/120/ 90	240/180/ 90

Table S5C11b Type A Construction: FRL of non-loadbearing parts of external walls

Distance from the fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
less than 1.5 m	-/ 90/ 90	-/120/120	-/180/180	-/240/240
1.5 to less than 3 m	-/ 60/ 60	-/ 90/ 90	-/180/120	-/240/180
3 m or more	-/ -/ -	-/ -/ -	-/ -/ -	-/ -/ -

Table S5C11c Type A Construction: FRL of external columns not incorporated into an external wall:

Column type	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
Loadbearing	90/ - / -	120/ -/ -	180/ -/ -	240/ -/ -
Non-loadbearing	–/–/–	–/–/–	–/–/–	–/–/–

Table S5C11d: Type A construction: FRL of common walls and fire walls

Wall type	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
Loadbearing or non-loadbearing	90/90/90	120/ 120/120	180/180/180	240/240/240

Table S5C11e: Type A construction: FRL of loadbearing internal walls

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
Fire-resisting lift and stair shafts	90/ 90/ 90	120/ 120/ 120	180/ 120/120	240/ 120/ 120
Bounding public corridors, public lobbies and the like	90/ 90/ 90	120/–/–	180/–/–	240/–/–
Between or bounding *sole-occupancy units*	90/ 90/ 90	120/–/–	180/–/–	240/–/–
Ventilating, pipe , garbage, and like shafts not used for the discharge of hot products of combustion	90/ 90/ 90	120/ 90/ 90	180/ 120/ 120	240/ 120/ 120

Table S5C11f: Type A construction: FRL of non-loadbearing internal walls

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
Fire-resisting lift and stair shafts	–/ 90/ 90	–/ 120/120	–/ 120/120	–/ 120/ 120
Bounding public corridors, public lobbies and the like	–/ 60/ 60	–/–/–	–/–/–	–/–/–
Between or bounding *sole-occupancy units*	–/ 60/ 60	–/–/–	–/–/–	–/–/–
Ventilating, pipe , garbage, and like shafts not used for the discharge of hot products of combustion	–/ 90/ 90	–/ 90/ 90	–/ 120/ 120	–/ 120/ 120

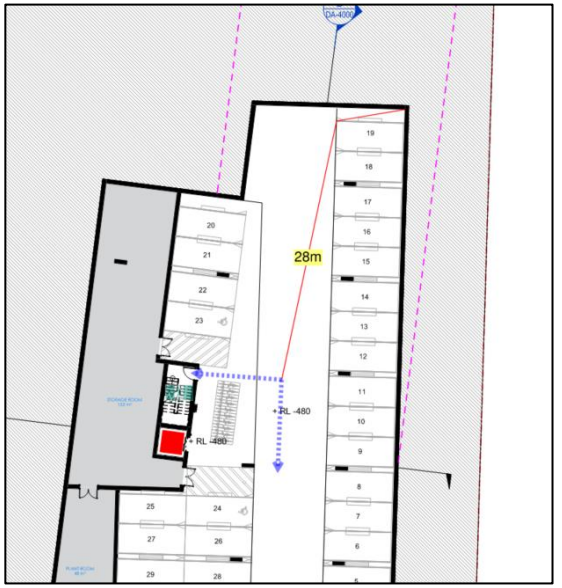
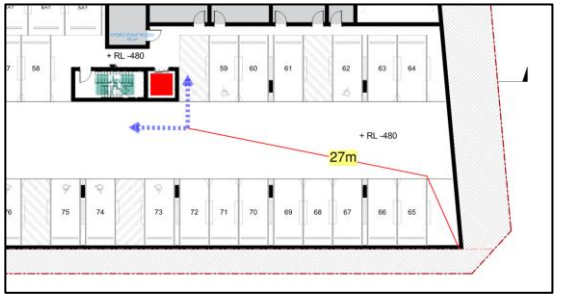
Table S5C11g: Type A construction: FRL of other building elements not covered by Tables S5C11a to S5C11f

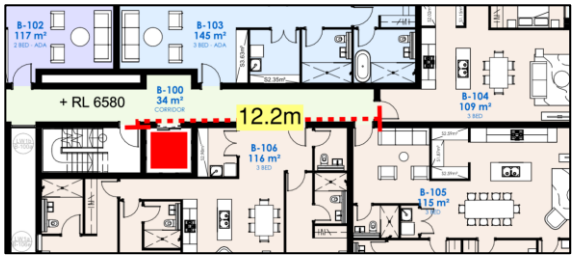
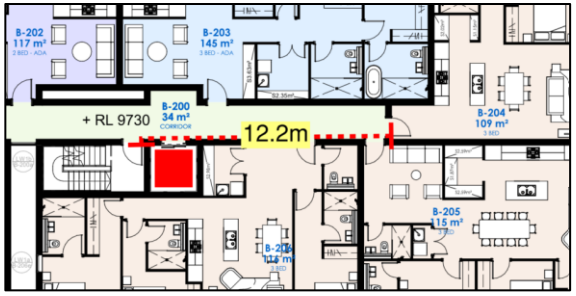
Building element	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
Other loadbearing internal walls. Internal beams, trusses and columns	90/–/–	120/–/–	180/–/–	240/–/–
Floors	90/ 90/ 90	120/ 120/ 120	180/ 180/ 180	240/ 240/ 240
Roofs	90/ 60/ 30	120/ 60/ 30	180/ 60/ 30	240/ 90/ 60

3.3 Section D – Access and Egress

Part D2 Provision for Escape

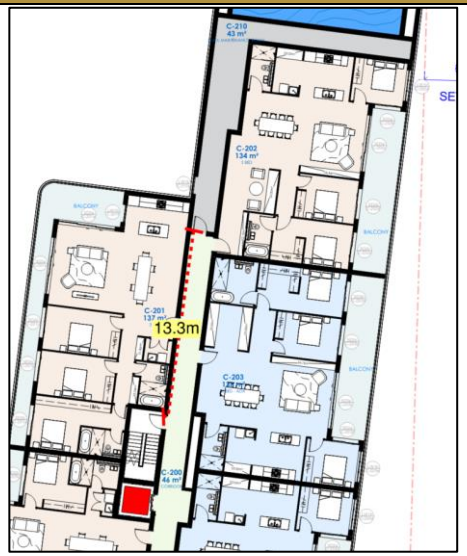
Clause		Design requirement	Compliance review
D2D2	Application of part	The Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 or 3 building or a Class 4 part of a building.	Noted.
D2D3	Number of exits required	This clause states that every building must have at least one exit from each storey. For class 2 to 8 buildings, in addition to any horizontal exit, at least 2 exits must be provided from each storey if the building has an effective height of more than 25m or if it is a class 2 or 3 building subject to C2D6. For basements, at least 2 exits must be provided from any storey if egress from that storey involves a vertical rise within the building of more than 1.5m, unless the floor area of the storey is not more than 50m^2 and the distance of travel from any point on the floor to a single exit is not more than 20m. The clause also states that every occupant of a storey or part of a storey must have access to an exit or at least 2 exits, if 2 or more exits are required, without passing through another sole-occupancy unit.	Complies.
D2D4	When fire-isolated stairways and ramps are required	D2D4 states that stairways or ramps serving as required exits in Class 2 and 3 buildings must be fire-isolated, unless they connect, pass through or pass by not more than 3 consecutive storeys in a Class 2 building, or 2 consecutive storeys in a Class 3 building. An extra storey may be included if the building has a sprinkler system, the extra storey is only for the accommodation of motor vehicles, or the required exit is separated from the extra storey by construction that prevents the passage of fire or smoke. In Class 5, 6, 7, 8 or 9 buildings, stairways or ramps serving as required exits must be fire-isolated, unless they are part of an open spectator stand, or the building has a sprinkler system, or the required exit is separated from the extra storey by construction that prevents the passage of fire or smoke.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

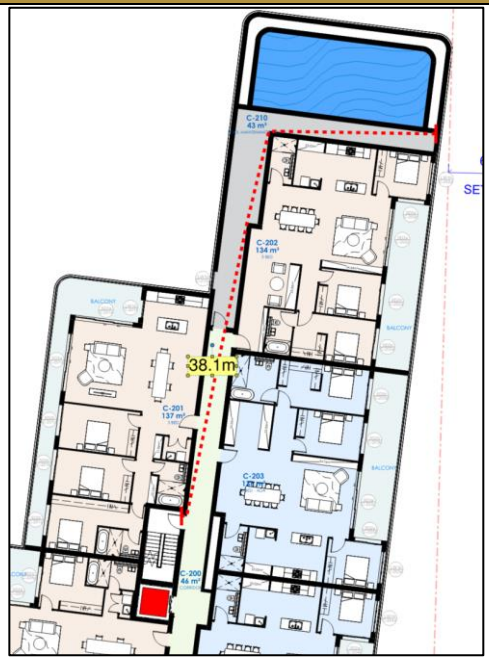
Clause		Design requirement	Compliance review
D2D5	Exit travel distances	D2D5 states that for Class 2 and 3 buildings, the entrance doorway of any sole-occupancy unit must be within 6 metres of an exit or a point from which travel in different directions to 2 exits is available, or 20 metres from a single exit serving the storey at the level of egress to a road or open space. No point on the floor of a room in a non-sole occupancy unit must be more than 20 metres from an exit or a point at which travel in different directions to 2 exits is available. For Class 5, 6, 7, 8 or 9 buildings, no point on a floor must be more than 20 metres from an exit, or a point from which travel in different directions to 2 exits is available, with the maximum distance to one of those exits not exceeding 40 metres.	**<u>Performance Solution Required:</u>** **Basement:** **(1)** Travel distance to the point of choice is measured up to 28m.   **Building B:**

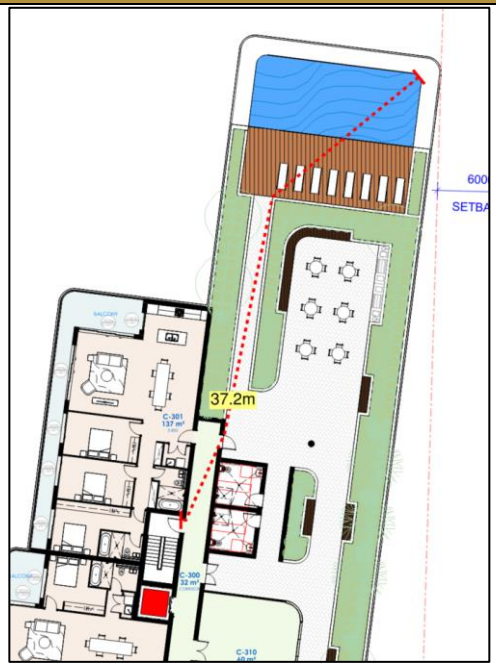
Clause	Design requirement	Compliance review
		(1) Travel distance on the residential levels up to 12.2m in lieu of 12m to the exit from the following units: a. Level 1 - Unit B-104  b. Level 2 – Unit B-204  **Building C:** **(1)** Extended Travel distances measured up to 13.2m in lieu of 12m to the exit from the following units: b. Level 1 – Unit C-102

Clause	Design requirement	Compliance review
		 **(2)** Travel distance up to 13.2m in lieu of 12m to the exit from the following units: c. Level 1 – C-102

Clause	Design requirement	Compliance review
		 **(3)** Travel distance up to 13.3m in lieu of 12m to the exit from the following units: d. Level 2 – C-202

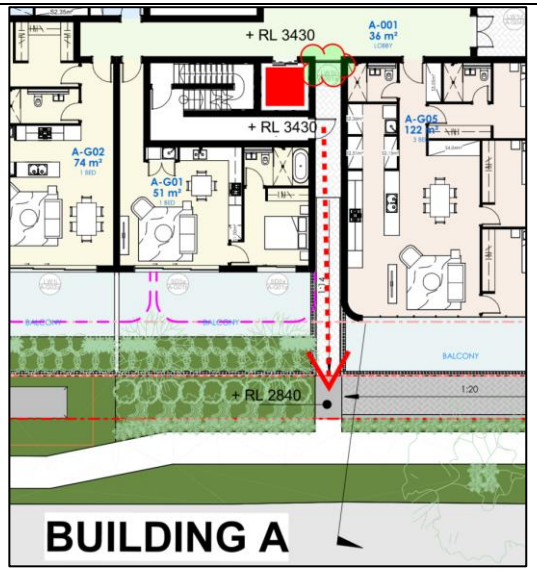
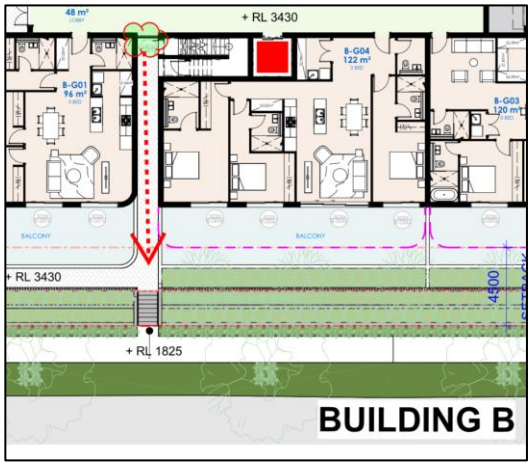
Clause	Design requirement	Compliance review
		 **(4)** Travel distance on Level 2 pool maintenance room up to 38.1m in lieu of 20m to the exit:

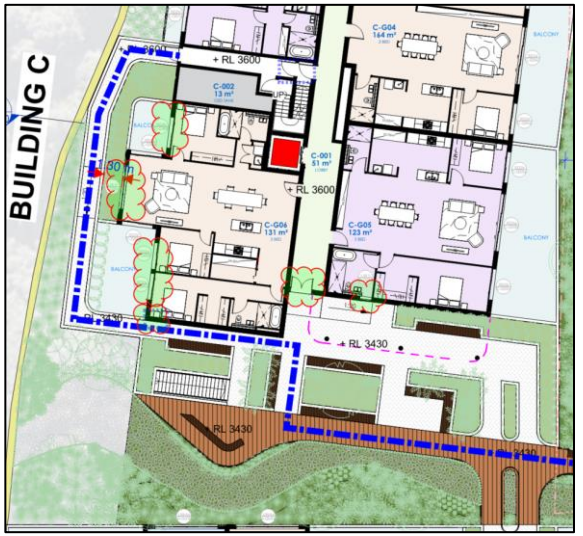
Clause	Design requirement	Compliance review
		 **(5)** Travel distance on Level 3 pool up to 37.2m in lieu of 20m to the exit:

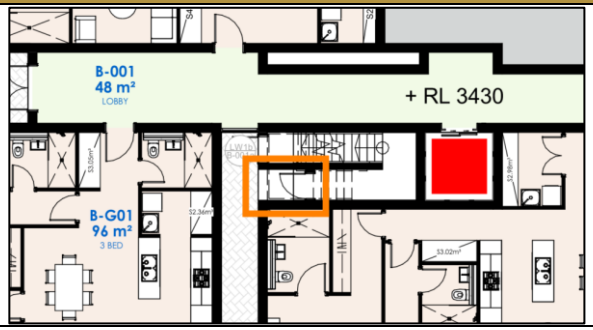
Clause		Design requirement	Compliance review
			
D2D6	Distance between alternative exits	Exits that are required as alternative means of egress must be distributed as uniformly as possible within or around the storey served, with unobstructed access to at least 2 exits readily available from all points on the floor, including lift lobby areas. They must be at least 9 metres apart, and no more than 45 metres apart in a Class 2 or 3 building, or a Class 9a healthcare building if it serves a patient care area, and no more than 60 metres apart in all other cases. Additionally, alternative paths of travel must not converge to become less than 6 metres apart.	*Complies*
D2D7	Height of exits, paths of travel to exits and doorways	In a required exit or path of travel to an exit the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

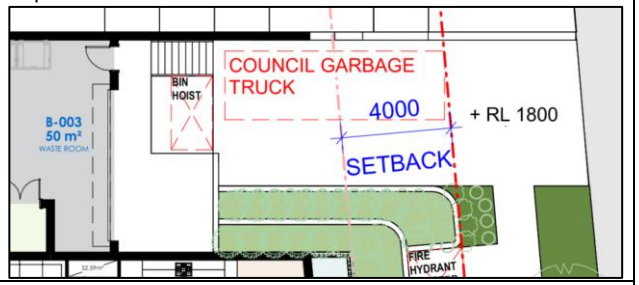
Clause		Design requirement	Compliance review
D2D8	Width of exits, paths of travel to exits and doorways	The unobstructed width of each required exit or path of travel to an exit, except for ladders provided in accordance with D2D21, D3D23 or I3D5, and doorways, must be not less than 1m. If the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than 1 m plus 250 mm for each 25 persons (or part) in excess of 100; or If the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than— ▪ 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D2D9	Width of doorway in exits or paths of travel to exits	In a required exit or path of travel to an exit, the unobstructed width of a doorway must be not less than the unobstructed width of each exit provided to comply with D2D8 minus 250 mm; or in any other case except where it opens to a sanitary compartment or bathroom — 750 mm wide.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D2D10	Exit width not to diminish in direction of travel	The unobstructed width of a required exit must not diminish in the direction of travel to a road or open space, except where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i).	*Complies.*
D2D11	Determination and measurement of exits and paths of travel to exits	For the purposes of D2D7 to D2D10 the following apply: ▪ The required width of a stairway or ramp in a required exit or path of travel to an exit must— o be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; and o extend without interruption, except for ceiling cornices, to a height not less than 2 m vertically above a line along the nosings of the treads or the floor surface of the ramp or landing. To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18.	*Architect to take note.*
D2D12	Travel via fire-isolated exits	(1) states that a doorway from a room must not open directly into a stairway, passageway, or ramp that is required to be fire-isolated unless it is from a public corridor, public lobby, or a sole-occupancy unit occupying all of a storey, or a sanitary compartment, airlock or the like.	*Complies.*

Clause	Design requirement	Compliance review
	(2) states that each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly or by way of its own fire-isolated passageway to a road or open space. Alternatively, it may discharge to a point within the confines of the building that is used only for pedestrian movement, car parking or the like and is open at least 2/3 of its perimeter, and into a covered area that adjoins a road or open space, is open for at least 1/3 of its perimeter, has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m, and provides an unimpeded path of travel from the point of discharge to the road or open space of not more than 6m.	**Capable of Compliance** **Buildings A and B:** The openings in the corridor within 6m of the discharge point of the fire isolated exits are to be protected internally in accordance with C4D5. It is noted, the openings on level 1 are more than 3m above the ground floor level of travel.

	(3) states that where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6m of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, that part of the wall must have an FRL (fire resistance level) of not less than 60/60/60, and any openings in the wall must be protected internally in accordance with C4D5 for a distance of 3m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser.	  **Performance Solution Required:** **Building C:** **(1)** The path of travel from the point of discharge of the fire-

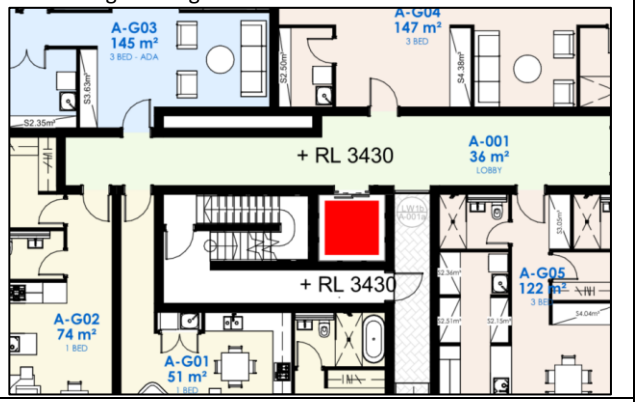
		isolated stairway necessitates passing with 6m of the unprotected openings in the external wall of the building.   **<u>Performance Solution Required:</u>** **Building B:** The descending stair flight discharges internally into the building.

Clause		Design requirement	Compliance review
			
		(4) states that if more than two access doorways, not from a sanitary compartment or the like, open to a required fire-isolated exit in the same storey, a smoke lobby in accordance with D3D7 must be provided or the exit must be pressurized in accordance with AS 1668.1.	Not applicable
		(5) states that a ramp must be provided at any change in level less than 600 mm in a fire-isolated passageway in a Class 9 building.	Not applicable
D2D13	External stairways or ramps in lieu of fire-isolated exits	An external stairway or ramp can be used as a required exit if it is non-combustible and protected if it is within 6m of an external wall of the building, and it serves a storey with an effective height of 25m or less.	Not applicable
D2D14	Travel by non-fire-isolated stairways or ramps	a) A stairway or ramp that serves as a required exit, but is not fire-isolated, must have a continuous path through its flights and landings from every floor it serves, to the level where it exits to a road or open space. b) In Class 2, 3, or 4 buildings, the distance from the doorway of a room or sole-occupancy unit to the nearest point of egress (such as a stairway or ramp) leading to a road or open space must not exceed 30 m in buildings of Type C construction and 60 m in all other types of buildings. This distance must be maintained even if the point of egress is not fire-isolated. c) In a Class 5, 6, 7, 8 or 9 building, the distance from any point on a floor to a point of egress to a road or open space by way of a required non-fire-isolated stairway or non-fire-isolated ramp must not exceed 80 m. d) In Class 2, 3, or 9a buildings, the distance between a required non-fire-isolated stairway or ramp and the nearest point of egress (such as a doorway or fire-isolated passageway) leading to a road or open space must not exceed 15 m. If there are two such points of egress, the distance between the stairway or ramp and either of the points of egress must not exceed 30 m, as long as the travel to each of the points of egress is in opposite or approximately opposite directions.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

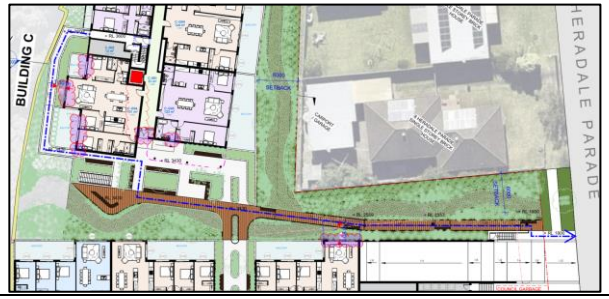
Clause		Design requirement	Compliance review
		e) In Class 5 to 8 or 9b buildings, the distance between a required non-fire-isolated stairway or ramp and the nearest point of egress (such as a doorway or fire-isolated passageway) leading to a road or open space must not exceed 20 m. If there are two such points of egress, the distance between the stairway or ramp and either of the points of egress must not exceed 40 m, as long as the travel to each of the points of egress is in opposite or approximately opposite directions. f) In Class 2 or 3 buildings, if two or more exits are required, they must be provided by means of internal non-fire-isolated stairways or non-fire-isolated ramps. Each exit must provide separate egress to a road or open space and be suitably smoke-separated from each other at the level of discharge. This means that the exits must be designed to prevent smoke from spreading between them in the event of a fire.	
D2D15	Discharge from exits.	The clause states that exits must not be blocked at the point of discharge and necessary barriers must be provided to prevent vehicles from blocking the exit or access to it. If a required exit leads to an open space, the path of travel to the road must have an unobstructed width of not less than the minimum width of the required exit or 1 meter, whichever is greater. Additionally, if an exit discharges to open space that is at a different level than the public road to which it is connected, the path of travel to the road must be by a ramp or stairway that meets the specified gradient requirements. Finally, alternative exits must be located as far apart as practical.	**Capable of Compliance:** Suitable barriers are to be provided between the stairway and the Council garbage truck parking on Ground level to prevent the egress being blocked. At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause. 
D2D16	Horizontal exits	Not applicable.	Not applicable.
D2D17	Non-required stairways, ramps or escalators	Not applicable	Not applicable
D2D18	Number of persons accommodated	For the purposes of the DtS Provisions, the number of persons accommodated in a storey, room or mezzanine must be determined with consideration to the purpose for which it is used and the layout of the floor area by— a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in Table D2D18 according to the use of that part, excluding spaces set aside for—	Designers to note.

Clause		Design requirement	Compliance review
		i. lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and ii. service ducts and the like, sanitary compartments or other ancillary uses; or b) reference to the seating capacity in an assembly building or room; or c) any other suitable means of assessing its capacity.	
D2D19	Measurement of distances	Informational clause – Interpretation of the nearest part of an exit.	Noted.
D2D20	Method of measurement	Informational clause.	Noted.
D2D21	Plant rooms, lift machine rooms, and electricity network substations: Concession	The clause states that ladders can be used as an alternative to stairways for egress in certain situations, such as plant rooms with a floor area of no more than 100 m2 or as a secondary point of egress in rooms with a floor area of no more than 200 m2. When used, ladders must comply with regulations and can only be used in certain ways such as being contained within a shaft or discharging within a storey. There are also specific requirements for ladder height, angle, distance from obstructions, and clear space at the foot of the ladder.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D2D22	Access to lift pits	Access to lift pits with a depth of under 3m must be provided through the lowest landing doors. If a lift pit exceeds 3m in depth, access must be provided in accordance with sub-clause (b).	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D2D23	Egress from primary schools	Not applicable.	Not applicable.

Part D3 Construction of Exits

Clause		Design requirement	Compliance review
D3D2	Application of part	With the exception of specified clauses in this part the Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of sole-occupancy units Class 2 & Class 3 buildings and Class 4 parts of buildings.	Noted
D3D3	Fire-isolated stairways and ramp	This clause states that any stairway or ramp (including any landings) that is required to be inside a fire-resistance shaft must be constructed using non-combustible materials, and it must be designed in such a way that in case of local failure, it will not cause structural damage to the shaft or affect the fire-resistance of the shaft.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D4	Non-fire-isolated stairways and ramps	This clause states that in a building with more than 2 storeys, the required stairs and ramps, including landings and any supporting building elements that are not required to be within a fire-resisting shaft, must be constructed according to a specific standard (D3D3) or made of reinforced or prestressed concrete, steel with a minimum thickness of 6mm or Timber that is at least 44mm thick, has an average density of 800kg/m3 at a moisture content of 12% and not joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D5	Separation of rising and descending stair flights	If a stairway serving as an exit is required to be fire-isolated— (a) there must be no direct connection between— (i) a flight rising from a storey below the lowest level of access to a road or open space; and (ii) a flight descending from a storey above that level; and (b) any construction that separates or is common to the rising and descending flights must be— (i) non-combustible; and (ii) smoke proof in accordance with S11C2.	**Performance Solution Required:** **Building A:** There is a direct connection between the rising and descending stair flights. 
D3D6	Open access ramps and balconies	Not applicable	Not applicable
D3D7	Smoke lobbies	Not applicable	Not applicable

Clause		Design requirement	Compliance review
D3D8	Installations in exits and paths of travel	The clause D3D8 states that access to service shafts and services other than to fire-fighting or detection equipment should not be provided from a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp. Additionally, openings to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like must not be located in any part of a required exit or any corridor, hallway, lobby or the like leading to a required exit. Gas or other fuel services should not be installed in a required exit. Services or equipment such as electricity metres, distribution boards or ducts, central telecommunications distribution boards or equipment, electrical motors or other motors serving equipment in the building may be installed in a required exit, except for fire-isolated exits specified in (a) or in any corridor, hallway, lobby or the like leading to a required exit, if the services or equipment are enclosed by non-combustible construction or a fire-protective covering with doorways or openings suitably sealed against smoke spreading from the enclosure. Electrical wiring may be installed in a fire-isolated exit if the wiring is associated with lighting, detection, or pressurization system serving the exit, security, surveillance or management system serving the exit, an intercommunication system or an audible or visual alarm system in accordance with D3D27 or the monitoring of hydrant or sprinkler isolating valves.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D9	Enclosure of Space Under Stairs and Ramps	The clause states that for fire-isolated stairways and ramps, the space below it must not be enclosed to form a cupboard or similar enclosed space if it is within the fire-isolated shaft. For non-fire isolated stairways and ramps, the space below it must not be enclosed to form a cupboard or other enclosed space unless the enclosing walls and ceilings have a fire-resistance level (FRL) of not less than 60/60/60 and any access doorway to the enclosed space is fitted with a self-closing /60/30 fire door.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D10	Width of Required Stairways and Ramps	A required stairway or ramp that exceeds 2 m in width is counted as having a width of only 2 m unless it is divided by a handrail or barrier continuous between landings and each division has a width of not more than 2 m.	Not applicable.
D3D11	Pedestrian ramps	(1) A fire-isolated ramp may be substituted for a fire-isolated stairway if the construction enclosing the ramp and the width and ceiling height comply with the requirements for a fire-isolated stairway. (2) A ramp serving as a required exit must— i. where the ramp is also serving as an accessible ramp under Part D3, be in accordance with AS1428.1; or ii. in any other case, have a gradient not steeper than 1:8.	**Capable of Compliance:** The ramp on the path of travel to open space in Building A Ground level is to include tactiles to the top and bottom of the ramp in accordance with AS1428.1. At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

<table>
<tr><th>Clause</th><th>Design requirement</th><th>Compliance review</th></tr>
<tr><td></td><td>(3) The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586.
<table>
<tr><th rowspan="2">+ Application</th><th colspan="2">+ Surface Conditions</th></tr>
<tr><th>+ Dry</th><th>+ Wet</th></tr>
<tr><td>Ramps steeper than 1:14</td><td>P4/R11</td><td>P5/R12</td></tr>
<tr><td>Ramp steeper than 1:20 but not steeper than 1:14</td><td>P3/R10</td><td>P4/R11</td></tr>
</table></td><td></td></tr>
<tr><td>D3D12 Fire isolated passageways</td><td>Clause D2.11 states that the enclosing construction of a fire-isolated passageway must have a fire-resistance level (FRL) of not less than that required for the stairway or ramp shaft when tested for a fire outside the passageway in another part of the building, if the passageway discharges from a fire-isolated stairway or ramp. If it is in any other case, the FRL should be not less than 60/60/60. However, the top construction of the fire-isolated passageway is not required to have an FRL if the walls of the fire-isolated passageway extend to the underside of a non-combustible roof covering or a ceiling having a resistance to the incipient spread of fire of not less than 60 minutes separating the roof space or ceiling space in all areas surrounding the passageway within the fire compartment.</td><td><u>Capable of Compliance:</u>
At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.</td></tr>
<tr><td>D3D13 Roof as open space</td><td>If an exit discharges to a roof of a building, the roof must—
a) have an FRL of not less than 120/120/120; and
b) not have any roof lights or other openings within 3 m of the path of travel of persons using the exit to reach a road or open space.</td><td><u>Performance Solution Required:</u>
Building C:
There are openings within 3m of the path of travel of persons using the fire-isolated exit to reach the road.
 
</td></tr>
</table>

<table>
<tr><th>Clause</th><th>Design requirement</th><th>Compliance review</th></tr>
<tr><td>D3D14 Goings and Risers</td><td>The stairs must fully comply with the tread, riser, and going dimensions specified in this clause. Additionally, the nosing of the stairs must be equipped with non-slip treads that meet the provisions outlined in AS1428.1-2009.

The following requirements pertain to the construction of all stairways:
▪ Each flight of stairs must consist of no more than 18 and no fewer than 2 risers.
▪ The dimensions of goings and risers must remain consistent within each flight.
▪ Risers must be constructed without any gaps, while treads must feature non-slip finishes and stair nosings.
The specified goings and risers should align with the values provided in Table D3D14 of the BCA.</td><td><u>Capable of Compliance:</u>
At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.</td></tr>
<tr><td>D3D15 Landings</td><td>In a stairway, landings with a maximum gradient of 1:50 may be used to limit the number of risers in each flight. Each landing must meet the following requirements:
▪ The landing must be at least 750mm long. If there is a change in direction, the length is measured 500mm from the inside edge of the landing.
▪ The surface of the landing must have a slip-resistance classification that is not less than the values listed in Table D3D15, as tested in accordance with AS 4586. Alternatively, if the edge of the landing leads to a flight below, a strip at the edge must have a slip-resistance classification not less than the values listed in Table D3D15, also tested in accordance with AS 4586.
<table><tr><th rowspan="2">Application</th><th colspan="2">Surface Conditions</th></tr><tr><th>Dry</th><th>Wet</th></tr><tr><td>Tread or landing surface</td><td>P3/R10</td><td>P4/R11</td></tr><tr><td>Nosing or landing edge strip</td><td>P3</td><td>P4</td></tr></table></td><td><u>Capable of Compliance:</u>
At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.</td></tr>
<tr><td>D3D16 Thresholds</td><td>The threshold of a doorway must not have a step or ramp closer to the doorway than the width of the door leaf, unless the following conditions are met:
▪ In a building required to be accessible by Part D4, if the doorway opens to a road or open space, it must be provided with a threshold ramp or step ramp in accordance with AS 1428.1.
(i) In other cases, if the doorway opens to a road or open space, external stair landing, or external balcony, the door sill must not be more than 190mm above the finished surface of the ground, balcony, or similar area to which the doorway opens.</td><td><u>Capable of Compliance:</u>
At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.</td></tr>
</table>

Clause	Design requirement	Compliance review
D3D17 Barriers to prevent falls	A continuous barrier must be installed along the side of various areas, including roofs with general access, stairways or ramps, floors, corridors, balconies, decks, verandahs, mezzanines, access bridges, or any delineated path of access to a building, if the trafficable surface is 1m or more above the surface below.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D18 Height of Barriers	The height requirements for barriers specified in this clause are as follows: 1. For stairways or ramps with a gradient of 1:20 or steeper, the barrier height must be a minimum of 865mm. 2. For landings to a stair or ramp where the barrier is provided along the inside edge of the landing and does not exceed 500mm in length, the barrier height must be a minimum of 865mm. 3. For all other locations, the barrier height must be a minimum of 1m. When measuring the height of a barrier provided under these requirements: ▪ For stairways, the height is measured above the nosing line of the stair treads. ▪ For other locations, the height is measured vertically from the surface beneath. A transition zone may be incorporated where the barrier height changes from 865mm on a stair flight or ramp to 1m at a landing or floor.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

Clause	Design requirement	Compliance review
D3D19 Openings in Balustrades	The requirements for openings in a required barrier are as follows: (1) Except as allowed by (2), openings in a required barrier must not allow a 125mm sphere to pass through. (2) In a fire-isolated stairway, fire-isolated ramp, or other area primarily used for emergency purposes: ▪ Openings in a required barrier must not allow a 300mm sphere to pass through. ▪ If rails are used, the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony, or similar area must not exceed a 150mm sphere. ▪ The opening between the rails must not be more than 460mm. (3) In Class 7 and Class 8 buildings (excluding carparks), the requirements are the same as in (2). (4) The requirements in (2) do not apply to external stairways, external ramps, or fire-isolated stairways/ramps serving Class 9b early childhood centres. (5) For a barrier provided under (1), the maximum 125mm barrier opening for a stairway (such as a non fire-isolated stairway) is measured above the nosing line of the stair treads. (6) Where a required barrier is fixed to the vertical face forming an edge of a landing, balcony, deck, stairway, or similar area, the opening between the barrier and the face must not exceed 40mm. For the purposes of (6), the opening is measured horizontally from the edge of the trafficable surface to the nearest internal face of the barrier.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D20 Barrier Climbability	The requirements for barriers as specified in this clause are as follows: (1) A barrier required by D3D17, located on a floor more than 4m above the surface beneath, must not include horizontal or near-horizontal elements that could facilitate climbing between 150mm and 760mm above the floor. (2) The requirements in (1) do not apply to: ▪ Fire-isolated stairways, fire-isolated ramps, and other areas primarily used for emergency purposes. ▪ External stairways. ▪ External ramps. ▪ Class 7 buildings (excluding carparks). Class 8 buildings.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

Clause	Design requirement	Compliance review
D3D21 Wire Balustrades	Where a required barrier is constructed of wire, it is deemed to meet the requirements of D3D19(1) if it is constructed in accordance with the following: (a) For horizontal wire systems— (i) when measured with a strain indicator, it must be in accordance with the tension values in Table D3D21a; or (ii) must not exceed the maximum deflections in Table D3D21c. (b) For non-continuous vertical wire systems, when measured with a strain indicator, must be in accordance with the tension values in Table D3D21a (see Note 4). (c) For continuous vertical or continuous near vertical sloped wire systems— (i) must have wires of no more than 2.5 mm diameter with a lay of 7×7 or 7×19 construction; and (ii) changes in direction at support rails must pass around a pulley block without causing permanent deformation to the wire; and (iii) must have supporting rails, constructed with a spacing of not more than 900 mm, of a material that does not allow deflection that would decrease the tension of the wire under load; and (iv) when the wire tension is measured with a strain indicator, it must be in accordance with the tension values in Table D3D21b and measured in the furthermost span from the tensioning device.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D22 Handrails	The requirements for handrails as specified in D3D22(1) of the NSW BCA are as follows: For ramps or flights: ▪ Handrails must be located along at least one side of the ramp or flight. ▪ If the total width of the stairway or ramp is 2m or more, handrails must be located along each side. ▪ In other cases, handrails must be fixed at a height of not less than 865mm. ▪ Handrails must be continuous between stair flight landings and have no obstructions that would break a hand-hold. ▪ In required exits serving areas required to be accessible, handrails must comply with clause 12 of AS 1428.1, except for clause 12(d). The required height of handrails is measured above the nosings of stair treads and the floor surface of the ramp, landing, or the like. The requirements of handrails do not apply to certain situations, including specific types of handrails, stairs or ramps with a change in elevation of less than 1m, landings, and winders where a newel post is installed.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D23 Fixed platforms, walkways, stairways, and ladders	a) A fixed platform, walkway, stairway, ladder, any going and riser, any balustrade or other barrier attached thereto may comply with AS1657 if it only serves a	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

Clause	Design requirement	Compliance review
	machinery or plant room or non-habitable part of a sole-occupancy unit in a Class 2 building or Class 4 part.	
D3D24 Doorways and doors	▪ Revolving doors are not permitted. ▪ Roller shutters or tilt-up doors are not permitted, except in Class 6, 7, or 8 buildings or parts with a floor area not exceeding 200m2, where the doorway is the only required exit, and it is held in the open position while the building or part is lawfully occupied. ▪ Sliding doors are not permitted, unless they lead directly to a road or open space, can be opened manually with a force not exceeding 110N, and can still be manually opened in case of power failure or malfunction of the power source. ▪ If a power-operated door is in a path of travel to a required exit, it must be able to be manually opened with a force not exceeding 110N in case of power failure or malfunction of the power source. a) These requirements ensure the safety and accessibility of doorways in relation to emergency egress and power failure situations.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D25 Swinging doors.	The following requirements apply to swinging doors in required exits or forming part of required exits: ▪ Swinging doors must not encroach by more than 500 mm on the required width of a required stairway, ramp, or passageway if it is likely to impede the path of travel for people already using the exit. When fully open, swinging doors must not encroach by more than 100 mm on the required width of the required exit. ▪ Swinging doors must swing in the direction of egress, unless: ▪ They serve a building or part with a floor area not exceeding 200 m2, they are the only required exit from the building or part, and they are fitted with a device to hold them in the open position. ▪ They serve a sanitary compartment or airlock, in which case they may swing in either direction. ▪ Swinging doors must not otherwise impede the path or direction of egress. In the measurement of encroachment, door handles or other furniture or attachments to the door should be included. These requirements ensure that swinging doors in required exits allow for safe and unobstructed egress.	*Complies*
D3D26 Operation of latch	The following requirements apply to doors in required exits, forming part of required exits, or in the path of travel to a required exit: ▪ Doors must be readily openable without a key from the side that faces a person seeking egress.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

Clause		Design requirement	Compliance review
		▪ For doors serving an area required to be accessible by Part D4, the operation of the latch must be such that the hand of a person who cannot grip will not slip from the handle, and there should be a clearance between the handle and the back plate or door face within specific dimensions. ▪ Alternatively, doors can be opened by a single hand pushing action on a single device located between 900 mm and 1.2 m from the floor. ▪ If the latch operation device is not located on the door leaf itself, manual controls to power-operated doors must meet specific requirements. ▪ These requirements do not apply to certain doors serving vaults, strong-rooms, sanitary compartments, sole-occupancy units, or spaces inaccessible to persons when locked, among other exceptions.	
D3D27	Re-entry from fire-isolated exits	Not applicable.	Not applicable.
D3D28	Signs on doors	A sign indicating "FIRE SAFETY DOOR" must be installed in a visible location on or near fire doors and smoke doors providing direct access to a fire-isolated exit, as well as doors leading to a horizontal exit or open space. The sign must also state "DO NOT OBSTRUCT" and "DO NOT KEEP OPEN" if the door is self-closing. This applies to all sides of the door except for doors leading to a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building. The letters must be at least 20mm high and in contrasting colour to the background.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D29	Protection of openable windows	The windows in bedrooms located in Class 2, 3, 4 buildings or Class 9b early childhood centres, with a floor more than 2m above the surface beneath must be equipped with protection. If the lowest level of the window opening is less than 1.7m above the floor, the openable portion of the window must be protected with a device or screen that restricts the window opening or secure fittings that prevent a 125 mm sphere from passing through and can resist an outward horizontal action of 250 N. The protection must have a child-resistant release mechanism if it can be removed, unlocked or overridden. Additionally, a barrier with a height of at least 865mm above the floor is required for openable windows 4m or more above the surface beneath, and must not allow a 125mm sphere to pass through it or have any climbing elements. In Class 7 and 8 buildings, fire-isolated stairways, fire-isolated ramps and other emergency areas, the barrier must not allow a 300mm sphere to pass through it.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
D3D30	Timber stairways: Concession	Not applicable.	Not applicable.

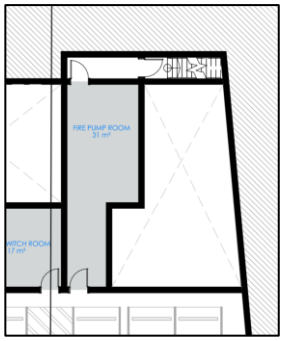
Clause		Design requirement	Compliance review
NSW D3D31	Doors in paths of travel to an entertainment venue	Not applicable	Not applicable.

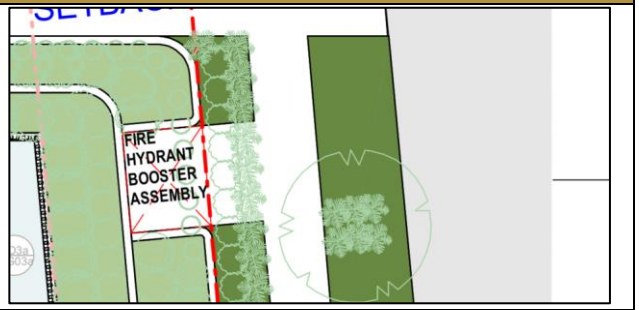
Part D4 Access for People with a Disability

Our scope of service for this project excludes an assessment in relation to Part D4. Refer to the access consultants report for further information.

3.4 Section E – Services and Equipment

Part E1 Fire Fighting Equipment

Clause	Design requirement	Compliance review
E1D2 Fire hydrants	A fire hydrant system must be provided for buildings with a total floor area greater than 500 m2, and within 50 km of a fire brigade station equipped to use it. The system must be installed according to AS2419.1, with exceptions for certain buildings such as Class 8 electricity network substations and buildings with a sprinkler system installed throughout. Internal fire hydrants must serve only the floor they are located on, except for sole-occupancy units in certain buildings which may be served by a single fire hydrant located at the level of egress. All points on a floor must be within reach of a 10 m hose stream from a fire hydrant outlet, with the hose extending at least 1 m into the area being covered.	**Capable of Compliance:** The building, due to its size exceeding 500m2, is required to have a fire hydrant system installed. The installation must be in accordance with AS2419.1. To meet the requirements of this Clause, a detailed plan of the fire hydrant system, including information on booster location, internal hydrants and other relevant details, must be submitted. **Further Information Required** Details of the clearance around the fire service pumps are to be provided at CC stage for review.  **Capable of Compliance:** Vegetation around booster assembly is to be cleared to allow for fire brigade intervention.

Clause		Design requirement	Compliance review
			
E1D3	Fire Hose-Reels	A fire hose reel system must be provided to serve a building with a floor area greater than 500 m2, or to serve any fire compartment without an internal fire hydrant. The system must comply with AS 2441 and provide coverage to only the storey it is located on, except for sole-occupancy units of not more than 2 storeys in certain buildings. Fire hose reels must be located internally, externally, or a combination of both to achieve the coverage specified in AS2441. Some buildings and rooms are exempt from this requirement. The location of fire hose reels must not impede the passage of fire or smoke doors, with exceptions for certain walls and doorways. If the normal water supply is insufficient, a pump or water storage facility may be required.	**Capable of Compliance:** A fire hose reel system is mandatory for the basement (Class 7a) as it meets the requirement of having a fire hydrant system and a floor area greater than 500m2. To ensure compliance with this Clause, detailed information on the proposed fire hose reel system must be provided.
E1D4	Sprinklers	A sprinkler system must be installed in a building or part of a building where required by Clause E1D5 – E1D12 as applicable, and comply with Spec 17 and 18 as applicable.	**Capable of Compliance:** A sprinkler system that complies with Specification 17, 18 and AS2118.1-2017 will be provided. Detailed plans, specifications and design certificate is to be provided demonstrating compliance with the requirements of this clause.
E1D5	Where sprinklers are required: all classifications	Sprinklers are required throughout all buildings if any part of the building has an effective height of more than 25m – ▪ including an open-deck carpark within a multi-classified building; but ▪ excluding: ▪ an open-deck carpark being a separate building; and a class 8 electricity network substation, with a floor area not more than 200m2, located within a multi-classified building.	**Capable of Compliance:** Refer to comments in E1D4.

Clause		Design requirement	Compliance review
E1D6	Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings	In a class 2 or 3 building and any other class of building containing a Class 2 or 3 part, sprinklers are required throughout the building if any part of the building has— ▪ a rise in storeys of 4 or more; and ▪ and effective height of not more than 25m. Note: This clause does not apply to a residential care building.	**Capable of Compliance:** Refer to comments in E1D4.
E1D7	Where sprinklers are required: Class 3 building used as a residential care building	Not applicable.	Not applicable.
E1D8	Where sprinklers are required: Class 6 building	Not applicable.	Not applicable.
E1D9	Where sprinklers are required: Class 7a building, other than an open-deck carpark	In a class 7a building, other than an open-deck carpark, sprinklers are required in fire compartments where more than 40 vehicles are accommodated.	**Capable of Compliance:** Refer to comments in E1D4.
E1D10	Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings	Not applicable.	Not applicable.
E1D11	Where sprinklers are required: Class 9b buildings	Not applicable.	Not applicable.
E1D12	Where sprinklers are required: additional requirements	Not applicable.	Not applicable.
E1D13	Where sprinklers are required: occupancies of excessive hazard	Not applicable.	Not applicable.
E1D14	Portable Fire Extinguishers	Portable fire extinguishers must be provided as listed in Table E1D14 and must be selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444. In a Class 2 or 3 building, portable fire extinguishers must be located within 10m of each SOU doorway.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
E1D15	Fire Control Centre	Not applicable.	Not applicable
E1D16	Fire precautions during construction	In a building under construction:	**Capable of Compliance:** At the Construction Certificate stage, plans are to include

Clause	Design requirement	Compliance review
	a) During construction not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit; and b) After the building has reached an effective height of 12 m – (i) the required fire hydrants and fire hose reels must be operational in at least every storey that is covered by the roof or the floor structure above, except the 2 uppermost storeys; and (ii) any required booster connections must be installed.	details demonstrating compliance with the requirements of this clause.
E1D17 Provision for special hazards	Suitable additional provision must be made if special problems of fighting fire could arise because of a) the nature or quantity of materials stored, displayed or used in a building or on the allotment; or b) the location of the building in relation to a water supply for fire-fighting purposes.	Noted.

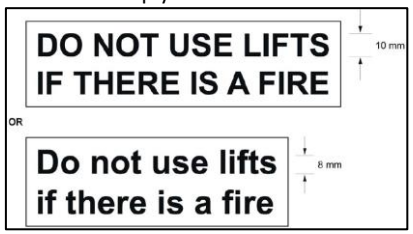
Part E2 Smoke Hazard Management

Clause		Design requirement	Compliance review
E2D3	General Requirements	▪ An air-handling system which does not form part of a smoke hazard management system in accordance with E2D4 to E2D20 and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must be designed and installed— ▪ to operate as a smoke control system in accordance with AS 1668.1; or ▪ such that it— ▪ incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and ▪ is arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1. ▪ For the purposes of the above, each sole-occupancy unit in a Class 2 or 3 building is treated as a separate fire compartment. ▪ Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with these Sections of the Standard. ▪ A smoke detection system must be installed in accordance with S20C6 to operate AS 1668.1 systems that are provided for zone pressurisation and automatic air pressurisation for fire-isolated exits.	**Capable of Compliance:** At the Construction Certificate stage, plans are to include details demonstrating compliance with the requirements of this clause.
E2D4	Fire-isolated exits	Not applicable.	Not applicable.
E2D5	Building more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building	Not applicable.	Not applicable.
E2D6	Buildings more than 25m in effective height: Class 5, 6, 7b, 8 and 9b buildings	Not applicable.	Not applicable.
E2D7	Buildings more than 25m in effective height: Class 9a buildings	Not applicable.	Not applicable.

Clause		Design requirement	Compliance review
E2D8	Buildings not more than 25m in effective height: Class 2 and 3 buildings and class 4 part of a building	In a Class 2 and 3 building or part of a building, or Class 4 part of a building, if the building is not more than 25 m in effective height it must be provided with an automatic smoke detection and alarm system complying with Specification 20.	In accordance with the building's classification as a Class 2 and 7a structure, an automatic smoke detection and alarm system in compliance with Specification 20 must be installed. To ensure compliance with this requirement, detailed information about the proposed system must be provided.
E2D9	Buildings not more than 25m in effective height 5, 6, 7b, 8 and 9b buildings	Not applicable.	Not applicable.
E2D10	Buildings not more than 25m in effective height: large isolated buildings subject to C3D4	Not applicable.	Not applicable.
E2D11	Buildings not more than 25m in effective height: Class 9a and 9c buildings	Not applicable.	Not applicable.
E2D12	Class 7a buildings	A class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2, must comply with clause 5.5 of AS 1668.1.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E2D13	Basements (other than class 7a buildings)	Not applicable.	
E2D14	Class 6 buildings – in fire compartments more than 2000m2:	Not applicable.	Not applicable.
E2D15	Class 6 buildings – in fire compartments more than 2000m2:	Not applicable.	Not applicable.
E2D16	Class 9b – assembly buildings: nightclubs, discotheques and the like	Not applicable.	Not applicable.
E2D17	Class 9b assembly buildings: exhibition halls	Not applicable.	Not applicable.
E2D18	Class 9b – assembly buildings: theatres and public halls	Not applicable.	Not applicable.
E2D19	**A**ssembly buildings:	Not applicable.	Not applicable.

Clause		Design requirement	Compliance review
E2D20	Class 9b assembly buildings: other assembly buildings	Not applicable.	Not applicable.
E2D21	Provision for special hazards	Additional smoke hazard management measures may be necessary due to the— ▪ Special characteristics of the building; or ▪ Special function or use of the building; or ▪ Special type or quantity of material stored, displayed or used in a building; or ▪ Special mix of classifications within a building or fire compartment, which are not addressed in E2D4 to E2D20.	Not applicable.

Part E3 Lift Installations

Clause		Design requirement	Compliance review
E3D2	Lift installations	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification 24.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E3D3	Stretcher facility in lifts	a) A stretcher facility must be provided – (i) in at least one emergency lift required by E3D5; or (ii) where an emergency lift is not required, if passenger lifts are installed to serve any storey above an effective height of 12 m, in at least one of those lifts to serve each floor served by lifts. b) A stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally with a clear space of not less than 600mm wide, 2000mm long and 1400mm high.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E3D4	Warning against use of lifts in fire	Warning signs required be provided must be displayed where they can be readily seen and must comply with the details and dimensions of Figure E3D4 below. 	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E3D5	Emergency lifts	Not applicable.	Not applicable.
E3D6	Landings	Access and egress to and from lift well landings must comply with the Deemed-to-Satisfy Provisions of Parts D2, D3 and D4.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E3D7	Passenger lifts	(1) In an accessible building, every passenger lift must be one of the following lift types, subject to the limitations (if any) of each lift type: 1. There are no limitations on the use of electric passenger lifts, electrohydraulic passenger lifts or inclined lifts. 2. Stairway platform lifts must not— 1. be used to serve a space in a building accommodating more than 100 persons calculated according to D2D18; or	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.

Clause		Design requirement	Compliance review
		2. be used in a high traffic public use area such as a theatre, cinema, auditorium, transport interchange, shopping centre or the like; or 3. be used where it is possible to install another type of passenger lift; or 4. connect more than 2 storeys; or 5. where more than 1 stairway lift is installed, serve more than 2 consecutive storeys; or 6. when in the folded position, encroach on the minimum width of a stairway required by D2D8 to D2D11. 3. A low-rise platform lift must not travel more than 1000 mm. 4. A low-rise, low-speed constant pressure lift must not— 1. for an enclosed type, travel more than 4 m; or 2. for an unenclosed type, travel more than 2 m; or 3. be used in a high traffic public use areas in buildings such as a theatre, cinema, auditorium, transport interchange, shopping complex or the like. 5. A small-sized, low-speed automatic lift must not travel more than 12 m. a) (2) A passenger lift referred to in (1) must not rely on a constant pressure device for its operation if the lift car is fully enclosed.	
E3D8	Accessible features required for passenger lifts	Informational Clause	Noted.
E3D9	Fire Service Controls	Where lifts serve any storey above an effective height of 12m, the following must be provided: a) A fire service recall control switch complying with E3.9 for— (i) a group of lifts; or (ii) a single lift not in a group that serves the storey. b) A lift car fire service drive control switch complying with E3.10 for every lift.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E3D10	Residential care buildings	Not applicable.	Not applicable.
E3D11	Fire Service Recall Control Switch	E3D11 specifies the requirements for fire service recall controls in a building. According to this clause, each group of lifts must have a fire service recall control switch that activates the fire service recall operation. The switch must be located at a landing nominated by the appropriate authority, be labeled "FIRE SERVICE" in white lettering on a red background, have two positions with	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.

Clause	Design requirement	Compliance review
	"OFF" and "ON" identified and be operable only by a key that is removable in either position. Adhesive labels must not be used for the labeling. The key must be able to turn all fire service recall control switches in the building and have a different key combination to other keys used for lifts in the building. The fire service recall operation must be activated either by switching the fire service recall control switch to "ON" or by a signal from a fire management system approved by the appropriate authority. This operation cancels all registered car and landing calls, inactivates door reopening devices affected by smoke, ensures lift cars travel to the nominated floor without stopping, opens lift doors at the nominated floor, and allows for the return to normal service if the fire service recall control switch is switched to "OFF". The requirements do not apply to lifts on inspection service or when the lift car fire service control switch is in the "ON" position. Lifts with manual controls must signal an alert to return to the nominated floor containing the call switch that activated the signal.	
E3D12 Lift car fire service drive control switch	E3D12 details the requirements for the lift car fire service drive control switch. This switch must be activated from within the lift car, located between 600 mm and 1500 mm above the lift car floor, labelled "FIRE SERVICE" in white lettering on a red background, have two positions with "OFF" and "ON" identified and operable only by a key that is removable in either position. Adhesive labels are not allowed to be used for the labelling. When the switch is turned to the "ON" position, the lift will not respond to the fire service recall control switch, cancel all registered lift car and landing calls, override all lift car call access control systems, inactivate all door reopening devices affected by smoke, allow the registration of lift car calls by lift car call buttons but not close the doors in response, activate door closing by constant pressure on the "door close" button, move the lift in response to registered lift car calls and ensure the doors do not open automatically but by constant pressure on the "door open" button. These requirements do not apply to a lift operating on inspection service. In multi-deck lift installation, systems must be in place that communicate to the fire officer that the fire service drive control switch will not operate until all decks have been cleared of passengers, an appropriate method of clearing all deck landings of passengers and maintain all doors to deck landings not containing the fire service control switch closed and inoperative while the lift is on fire service drive.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.

Part E4 Emergency Lighting, Exit Signs and Warning Systems

Clause		Comment	Compliance
E4D2	Emergency lighting requirements	This clause details when emergency lighting must be installed in Class 2 to 9 buildings. The requirements for buildings and parts of buildings are detailed in sub-clauses (a) to (i) and each sub-clause must be considered as more than one may apply to any single building.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E4D3	Measurement of distance	Distance, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.	Noted.
E4D4	Design and operation of emergency lighting	Every required emergency lighting system must comply with AS/NZS 2293.1-2018.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E4D5	Exit signs	An exit sign must be clearly visible to persons approaching the exit and must be installed on, above or adjacent to each door providing egress from a building. Sub-clauses (a) to (d) set out the situations where exit signs are required to be installed.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E4D6	Direction signs	If an exit is not readily apparent to persons occupying or visiting the building then exit signs must be installed in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a required exit.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E4D7	Class 2 and 3 buildings and Class 4 parts: Exemptions	The requirements of Clause E4D5 does not apply to— a) a Class 2 building in which every door referred to is clearly and legibly labelled on the side remote from the exit or balcony— (i) with the word “EXIT” in capital letters 25 mm high in a colour contrasting with that of the background; or (ii) by some other suitable method; and b) an entrance door of a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E4D8	Design and operation of exit signs	Every required exit sign must comply with AS/NZS 2293.1 - 2018 and be clearly visible at all times when the building is occupied by any person having the legal right of entry into the building.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
E4D9	Sound systems and intercom systems for emergency purposes	Not applicable.	Not applicable.

Specification 17 Fire Sprinkler Systems

Clause	Design requirement	Compliance review

Spec. 17 Fire Sprinkler Systems	Subject to the requirements of this specification, an automatic fire sprinkler system must comply with the applicable standard as listed in S17C2.
	
	Quick response sprinklers may be installed only if they are suitable for the type of application proposed and it is demonstrated that the sprinkler system is designed to accommodate their use.
	
	Sprinkler alarm valves must be located in a secure room or enclosure which has direct egress to a road or open space.
	All sprinkler valve rooms and enclosures must be secured with a system suitable for use by the fire brigade.
	
	A required sprinkler system must be provided with at least one water supply.
	
	A required sprinkler system, except a FPAA101D sprinkler system, must be connected to and activate a building occupant warning system complying with S20C7.
	
	Where a smoke hazard management system is installed and is actuated by smoke detectors, the sprinkler system must, wherever practicable, be arranged to also activate the smoke hazard management system.
	
	▪ Where a sprinkler system is installed—
	  ▪ over any stage area in a theatre, public hall or the like, visual and audible status indication of sprinkler valves must be provided at the location normally used by the stage manager; or
	  ▪ in a space housing lift electrical and control equipment (including machine rooms, secondary floors and sheave rooms), any valves provided to control sprinklers in these spaces must be located adjacent to the space.
	  ▪ Any valves provided to control sprinklers required by (1) must be fitted with anti-tamper monitoring devices connected to a monitoring panel.
		Capable of Compliance:
		At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.

Specification 18 Class 2 and 3 buildings not more than 25 m in effective height

Clause		Design requirement	Compliance review
Spec. 18	Class 2 and 3 buildings not more than 25 m in effective height	This Specification applies only to Class 2 or 3 buildings with a rise in storeys of 4 or more, and an effective height of less than 25m. An automatic fire sprinkler system installed in a Class 2 or 3 building must comply with one of the following: ▪ AS 2118.1 - 2017 or ▪ AS 2118.4 - 2012 or ▪ FPAA101D (except for residential care buildings); or ▪ FPAA101H (except for residential care buildings). Where a Class 2 or 3 building is provided with a AS 2118.1 - 2017 or AS 2118.4 - 2012 may utilise the available concessions, provided: ▪ the automatic fire sprinkler system is permanently connected to a fire alarm monitoring system connected to a fire station or fire station dispatch centre in accordance with Spec. 18 if the system has more than 100 sprinkler heads; or ▪ The sprinkler system is fitted with heads complying with Cl. 4.4, 4.5 and 5.5.2 of AS 2118.4 in bedrooms, and ▪ An automatic fire detection and alarm system is provided in accordance with Specification 20, except that it need not be connected to a fire alarm monitoring system connected to a fire station or fire station dispatch centre	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.

3.5 Section F – Heath and Amenity

Part F1 Damp and Weatherproofing

Clause		Design requirement	Compliance review
F1D1	Deemed-to-Satisfy Provisions	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F1P1 to F1P4 are satisfied by complying with F1D2 to F1D8. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable. Performance Requirement F3P1 does not apply to– a) a Class 7 or 8 building where in the particular case there is no necessity for compliance; or b) a garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes; or c) an open spectator stand or open-deck carpark	A performance solution report is to be prepared by a suitably qualified person in consultation with relevant stakeholders, to demonstrate compliance with Performance Requirement FP1.4 for the external wall construction (including openings around windows and doors) around the perimeter of the building. The steps outlined in Clause A2G2 should be followed to produce the performance solution report. For the roof, compliance with Performance Requirement F3P1 may be achieved by adhering to the relevant Deemed-to-Satisfy provisions in Part F1 for the roof and/or roof covering. Compliance will be detailed during the next phase of design.
F1D3	Stormwater drainage	Stormwater drainage must be designed and constructed in accordance with AS/NZS 3500.3-2018.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
F1D4	Exposed Joints	Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must— (a) be protected in accordance with Section 2.9 of AS 4654.2; and (b) not be located beneath or run through a planter box, water feature or similar part of the building.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
F1D5	External above ground membranes	A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane— 1. consisting of materials complying with AS 4654.1; and designed and installed in accordance with AS 4654.2.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
F1D6	Damp-proofing	(1) Except for a building covered by (3), moisture from the ground must be prevented from reaching— 1. the lowest floor timbers and the walls above the lowest floor joists; and 2. the walls above the damp-proof course; and 3. the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders. (2) Where a damp-proof course is provided, it must consist of—	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.

Clause	Design requirement	Compliance review
	1. a material that complies with AS/NZS 2904; or 2. impervious sheet material in accordance with AS 3660.1. (3) The following buildings need not comply with (1): 1. A Class 7 or 8 building where in the particular case there is no necessity for compliance. 2. A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes. An open spectator stand or open-deck carpark.	
F1D7 Damp-proofing of floors on the ground	(1) If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870. (2) The requirements of (1) do not apply where— 1. weatherproofing is not required; or the floor is the base of a stair, lift or similar shaft which is adequately drained by gravitation or mechanical means.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
F1D8 Subfloor ventilation	Not applicable.	Not applicable.

Part F2 Wet Areas and Overflow Protection

Clause		Design requirement	Compliance review
F2D2	Wet area construction	(1) In a Class 2 and 3 building and a Class 4 part of a building, building elements in wet areas must— 1. be water resistant or waterproof in accordance with Specification 26; and 2. comply with AS 3740. (2) In a Class 5, 6, 7, 8 or 9 building, building elements in a bathroom or shower room, a slop hopper or sink compartment, a laundry or sanitary compartment must— 1. be water resistant or waterproof in accordance with Specification 26; and 2. comply with AS 3740, as if they were in a Class 2 or 3 building or a Class 4 part of a building.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
F2D3	Rooms containing urinals	Not applicable.	Not applicable.
F2D4	Floor wastes	(1) In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above a sole-occupancy unit or public space must have a floor waste. (2) Where a floor waste is installed— 1. the minimum continuous fall of a floor plane to the waste must be 1:80; and 2. the maximum continuous fall of a floor plane to the waste must be 1:50.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.

Part F3 Roof and Wall Cladding

Clause		Design requirement	Compliance review
F3D2	Roof coverings	A roof must be covered with— 1. roof tiles complying with AS 2049, fixed in accordance with AS 2050; or 2. metal sheet roofing complying with AS 1562.1; or 3. plastic sheet roofing designed and installed in accordance with AS 1562.3; or 4. terracotta, fibre-cement and timber slates and shingles designed and installed in accordance with AS 4597, except in cyclonic areas; or 5. an external waterproofing membrane complying with F1D5.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
F3D3	Sarking	Sarking-type materials used for weatherproofing of roofs and walls must comply with AS/NZS 4200 Parts 1 and 2.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
F3D4	Glazed assemblies	(1) Subject to (2) and (3), the following glazed assemblies in an external wall, must comply with AS 2047 requirements for resistance to water penetration: 1. Windows. 2. Sliding and swinging glazed doors with a frame, including French and bi-fold doors with a frame. 3. Adjustable louvres. 4. Shopfronts. 5. Window walls with one piece framing. (2) The following buildings need not comply with (1): 1. A Class 7 or 8 building 2. A garage, tool shed, sanitary compartment, or the like. 3. An open spectator stand or open-deck carpark. (3) The following glazed assemblies need not comply with (1): 1. All glazed assemblies not in an external wall. 2. Revolving doors. 3. Fixed louvres. 4. Skylights, roof lights and windows in other than the vertical plane. 5. Sliding and swinging glazed doors without a frame. 6. Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047. 7. Second-hand windows, re-used windows and recycled windows. 8. Heritage windows.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.
F3D5	Wall Cladding	External wall cladding must comply with one or a combination of the following: 1. Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700. 2. Autoclaved aerated concrete: AS 5146.3. 3. Metal wall cladding: AS 1562.1.	**Capable of Compliance:** At the Construction Certificate stage, services plans are to include details demonstrating compliance with the requirements of this clause.

Part F4 Sanitary and Other Facilities

Clause		Design requirement	Compliance review
F4D2	Facilities in residential buildings	1) For facilities in Class 2 buildings, the following applies: 1. Within each sole-occupancy unit, provide— i. a kitchen sink and facilities for the preparation and cooking of food; and ii. a bath or shower; and iii. a closet pan; and iv. a washbasin. 2. For laundry facilities, provide either— i. in each sole-occupancy unit— A. clothes washing facilities, comprising at least one washtub and a space for a washing machine; and B. clothes drying facilities comprising clothes line or a hoist with not less than 7.5 m of line, or space for one heat operated drying cabinet or appliance in the same room as the clothes washing facilities; or For the purposes of (1) and (2), a kitchen sink or washbasin must not be counted as a laundry washtub.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
F4D3	Calculation of number of occupants and fixtures.	(1) The number of persons accommodated must be calculated according to D2D18 if it cannot be more accurately determined by other means. (2) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females. (3) In calculating the number of sanitary facilities to be provided under F4D2 and F4D4, a unisex facility required for people with a disability (other than a facility provided under F4D12) may be counted once for each sex. a) (4) For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary products.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
F4D4	Facilities in Class 3 to 9 buildings	Separate sanitary facilities must be provided for males and females in certain buildings, unless exceptions apply. The specific requirements for the number of facilities are outlined in tables. If a building has 10 or fewer employees, a unisex facility may be provided. If the majority of employees are of one sex, up to two employees of the other sex may share facilities with privacy measures.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
F4D5	Accessible sanitary facilities	This clause requires the provision of accessible sanitary facilities in buildings, including unisex compartments and showers. It specifies compliance with AS 1428.1 and the need for adequate circulation spaces. The clause also mentions the location requirements and exemptions for accessible facilities on specific storeys or levels.	Refer to the access consultant's report.

Clause		Design requirement	Compliance review
F4D6	Accessible unisex sanitary compartments	The minimum number of accessible unisex sanitary compartments for each class of building is as follows: 1. For a Class 2 building, where sanitary compartments are provided in common areas, not less than 1. For Class 5, 6, 7, 8 or 9 buildings, where F4D4 requires closet pans 1 on every storey containing sanitary compartments; and where a storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks.	Refer to the access consultant's report.
F4D7	Accessible unisex showers	Not applicable	Not applicable
F4D8	Construction of sanitary compartments	(1) Sanitary compartments must have doors and partitions that separate adjacent compartments and extend— 1. from floor level to the ceiling in the case of a unisex facility; or 2. to a height of not less than 1.5 m above the floor if primary school children are the principal users; or 3. 1.8 m above the floor in all other cases. (2) Unless there is a clear space of at least 1.2 m, measured in accordance with Figure F4D8, between the closet pan within the sanitary compartment and the doorway, the door to a fully enclosed sanitary compartment must— 1. open outwards; or 2. slide; or be readily removable from the outside of the sanitary compartment.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
F4D9	Interpretation: Urinals and washbasins	Sanitary compartments must have doors and partitions that separate adjacent compartments and extend to an appropriate height to ensure privacy. The door must open outwards, slide or be readily removable from the outside of the compartment. Urinal and washbasin may be in the form of individual stall, wall-hung or part of a hand washing trough.	Note.
F4D11	Waste management	Not applicable	Not applicable
F4D12	Accessible adult change facilities	Not applicable	Not applicable

Clause		Design requirement	Compliance review
F5D2	Height of rooms and other spaces.	In summary, the height of rooms and spaces in Class 2 and 3 buildings and Class 4 parts of buildings must be at least 2.1 metres for kitchens, laundries, and corridors, 2.4 m for habitable rooms excluding kitchens, and 2.2-2.4 m for rooms with sloping ceilings or projections. In all buildings, bathrooms, commercial kitchens, stairways, ramps, and required accessible adult change facilities must have a height of at least 2.1 m, and a height of 2.4 m is required for all other spaces in Class 5, 6, 7, and 8 buildings, except for corridors and passageways which must have a height of 2.1 m.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

Part F6 Light and Ventilation

Clause		Design requirement	Compliance review
F6D2	Provision of natural light	a) Natural light must be provided in a Class 2 building— to all habitable rooms[1].	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
F6D3	Methods and extent of natural light	(1) *Required* natural light must be provided by— a. *windows*, excluding *roof lights*, that— i. have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 10% of the *floor area* of the room; and ii. are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or b. *roof lights*, that— i. have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 3% of the floor area of the room; and ii. are open to the sky; or iii. a proportional combination of *windows* and *roof lights required* by (a) and (b).	

[1] A room used for normal domestic activities, and—
1. includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom; but
2. excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

Clause		Design requirement	Compliance review
F6D4	Natural light borrowed from adjoining room	(1) Natural light to a room in a Class 2 building or Class 4 part of a building or in a sole-occupancy unit of a Class 3 building, may come through one or more glazed panels or openings from an adjoining room (including an enclosed verandah) if— (a) both rooms are within the same sole-occupancy unit or the enclosed verandah is on common property; and (b) the glazed panels or openings have an aggregate light transmitting area of not less than 10% of the floor area of the room to which it provides light; and (c) the adjoining room has— i. windows, excluding roof lights, that— A. have an aggregate light transmitting area of not less than 10% of the combined floor areas of both rooms; and B. are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or ii. roof lights, that— 1. have an aggregate light transmitting area of not less than 3% of the combined floor areas of both rooms; and 2. are open to the sky; or iii. a proportional combination of windows and roof lights required by i) & ii) (2) The areas specified in (1)(b) and (c) may be reduced as appropriate if direct natural light is provided from another source.	
F6D5	Artificial lighting	a) Artificial lighting must be provided— (i) in required stairways, passageways, and ramps; and (ii) if natural light complying with F6D3 is not available, and the periods of occupation or use of the room or space will create undue hazard to occupants seeking egress in an emergency, in – A. **Class 2 buildings –** to sanitary compartments, bathrooms, shower rooms, airlocks, laundries, common stairways and other spaces used in common by the occupants of the building; and B. **Class 6 buildings –** to all rooms that are frequently occupied, all spaces required to be accessible, all corridors, lobbies, internal stairways, other circulation spaces and paths of egress. b) The artificial lighting system must comply with AS/NZS 1680.0-2009.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
F6D6	Ventilation of rooms	A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have— a) natural ventilation complying with F6D7; or	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.

Clause		Design requirement	Compliance review
		b) a mechanical l ventilation or air-conditioning system complying with AS 1668.2 and AS/NZS 3666.1.	
F6D7	Natural ventilation	Natural ventilation provided in accordance with F6D6(a) must consist of openings, windows, doors or other devices which can be opened— (a) with a ventilating area not less than 5% of the floor area of the room required to be ventilated; and (b) open to— A. a suitably sized court, or space open to the sky; or B. an open verandah, carport, or the like; or C. an adjoining room in accordance with F4.7.	
F6D8	Ventilation borrowed from adjoining room	Natural ventilation to a room may come through a window, opening, door or other device from an adjoining room (including an enclosed verandah) if both rooms are within the same sole-occupancy unit or the enclosed verandah is common property, and— a) in a Class 2 building, a sole-occupancy unit of a Class 3 building or Class 4 part of a building— (i) the room to be ventilated is not a sanitary compartment; and (ii) the window, opening, door or other device has a ventilating area of not less than 5% of the floor area of the room to be ventilated; and (iii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 5% of the combined floor areas of both rooms; and b) in a Class 5, 6, 7, 8 (except a Class 8 electricity network substation) or 9 building— (i) the window, opening, door or other device has a ventilating area of not less than 10% of the floor area of the room to be ventilated, measured not more than 3.6 m above the floor; and (ii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 10% of the combined floor areas of both rooms; and c) the ventilating areas specified in (a) and (b) may be reduced as appropriate if direct natural ventilation is provided from another source.	

Clause		Design requirement	Compliance review
F6F9	Restriction on location of sanitary compartments	Sanitary compartments must not open directly into— a) a kitchen or pantry; or b) a public dining room or restaurant; or c) a dormitory in a Class 3 building; or d) a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand); or e) a workplace normally occupied by more than one person.	Complies
F6D10	Airlocks	Not applicable	Not applicable
F6D11	Carparks	Every storey of a carpark, except an open-deck carpark, must have— 1. a system of mechanical ventilation complying with AS 1668.2; or a) a system of natural ventilation complying with Section 4 of AS 1668.4.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
F6D12	Kitchen local exhaust ventilation	Not applicable	Not applicable

Part F7 Sound transmission and insulation

Clause		Design requirement	Compliance review
F7D2	Application of Part	The Deemed-to-Satisfy Provisions of this Part apply to Class 2 building.	**Capable of Compliance:** At the Construction Certificate stage, plans and specifications are to include details demonstrating compliance with the requirements of this clause.
F7D3	Determination of airborne sound insulation ratings	A form of construction required to have an airborne sound insulation rating must— 1. have the required value for weighted sound reduction index (R_w) or weighted sound reduction index with spectrum adaptation term ($R_w + C_{tr}$) determined in accordance with AS/NZS ISO 717.1 using results from laboratory measurements; or 2. comply with Specification 28.	**Capable of Compliance:** At the Construction Certificate stage, plans and specifications are to include details demonstrating compliance with the requirements of this clause.
F7D4	Determination of impact sound insulation ratings	The floor and wall in a building required to have an impact sound insulation rating must comply with the specified measurements or standards listed in Specification 28, and walls in Class 2 or 3 buildings must have discontinuous construction. Walls in Class 9c buildings must also comply with the specified standards.	**Capable of Compliance:** At the Construction Certificate stage, plans and specifications are to include details demonstrating compliance with the requirements of this clause.
F7D5	Sound insulation rating of floors	a) A floor in a Class 2 or 3 building must have an $R_w + C_{tr}$ (airborne) not less than 50 and an $L_{n,w}$ (impact) not more than 62 if it separates— (i) sole-occupancy units; or (ii) a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification. b) A floor in a Class 9c building separating must have an Rw sole-occupancy units not less than 45.	**Capable of Compliance:** At the Construction Certificate stage, plans and specifications are to include details demonstrating compliance with the requirements of this clause.
F7D6	Sound insulation of walls	Wall in Class 2 or 3 buildings must have an Rw + Ctr of at least 50 if separating sole-occupancy units, an Rw of at least 50 if separating a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification, and comply with F7D4(2) if separating a bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than a kitchen) in an adjoining unit or a sole-occupancy unit from a plant room or lift shaft. A door may be incorporated in a wall separating a sole-occupancy unit from a stairway, public corridor, public lobby or the like, provided the door assembly has an Rw not less than 30. Wall in Class 9c buildings must have an Rw not less than 45 if separating sole-occupancy units or a sole-occupancy unit from a kitchen, bathroom, sanitary compartment, laundry, plant room or utilities room and comply with F7D4(2) if separating a sole-occupancy unit from a kitchen or laundry. Wall required to have	**Capable of Compliance:** At the Construction Certificate stage, plans and specifications are to include details demonstrating compliance with the requirements of this clause.

Clause		Design requirement	Compliance review
		sound insulation must continue to the underside of the floor or roof above or a ceiling that provides the sound insulation required for the wall.	
F7D7	Sound insulation rating of internal services	Ducts, pipes, and other utilities that serve or pass through multiple sole-occupancy units must be separated by construction with a minimum Rw + Ctr (airborne) of 40 for habitable rooms and 25 for kitchens or non-habitable rooms. Storm water pipes must also be separated accordingly.	**Capable of Compliance:** At the Construction Certificate stage, plans and specifications are to include details demonstrating compliance with the requirements of this clause.
F7D8	Sound isolation of pumps	A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.	**Capable of Compliance:** At the Construction Certificate stage, plans and specifications are to include details demonstrating compliance with the requirements of this clause.

Part F8 Condensation management

Clause	Design requirement	Compliance review
F8D2 Application of Part	The Deemed-to-Satisfy Provisions of this Part apply to a sole-occupancy unit of a Class 2 building.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
F8D3 External wall construction	(1) Where a pliable building membrane is installed in an external wall, it must— 1. comply with AS 4200.1; and 2. be installed in accordance with AS 4200.2; and 3. be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building. (2) Where a pliable building membrane, sarking-type material or insulation layer is installed on the exterior side of the primary insulation layer of an external wall it must have a vapour permeance of not less than— 1. in climate zones 4 and 5, 0.143 µg/N.s; and 2. in climate zones 6, 7 and 8, 1.14 µg/N.s. (3) Except for single skin masonry and single skin concrete, where a pliable building membrane is not installed in an external wall, the primary water control layer must be separated from water sensitive materials by a drained cavity.	**Capable of Compliance:** At the Construction Certificate stage, architectural plans are to include details demonstrating compliance with the requirements of this clause.
F8D4 Exhaust systems	(1) An exhaust system installed in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of— 1. 25 L/s for a bathroom or sanitary compartment; and 2. 40 L/s for a kitchen or laundry. (2) Exhaust from a kitchen, kitchen range hood, bathroom, sanitary compartment or laundry must discharge directly or via a shaft or duct to outdoor air. (3) Where space for a clothes drying appliance is provided in accordance with F4D2(1)(b), space must also be provided for ducting from the clothes drying appliance to outdoor air. (4) (3) does not apply if a condensing-type clothes drying appliance is installed. (5) An exhaust system that is not run continuously and is serving a bathroom or sanitary compartment that is not ventilated in accordance with F6D7 must— 1. be interlocked with the room's light switch; and 2. include a run-on timer so that the exhaust system continues to operate for 10 minutes after the light switch is turned off.	**Capable of Compliance:** At the Construction Certificate stage, mechanical plans are to include details demonstrating compliance with the requirements of this clause.

Clause	Design requirement	Compliance review
	(6) Except for rooms that are ventilated in accordance with F6D7, a room with space for ducting a clothes drying appliance to outdoor air in accordance with (3) must be provided with make-up air in accordance with AS 1668.2	
F8D5 Ventilation of roof spaces	The exhaust system in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of 25 L/s for a bathroom or sanitary compartment or 40 L/s for a kitchen or laundry. The exhaust must be discharged directly to outdoor air or via a shaft or duct to outdoor air or to a roof space that is ventilated with evenly distributed openings, with a total unobstructed area of 1/300 of the respective ceiling area if the roof pitch is greater than 22o, 30% of which must be located not more than 900 mm below the ridge or highest point of the roof space, with the remaining area provided by eave vents.	**Capable of Compliance:** At the Construction Certificate stage, mechanical plans are to include details demonstrating compliance with the requirements of this clause.

3.6 Section G – Ancillary Provisions

Part G1 Minor Structures and components

Clause		Design requirement	Compliance review
G1D1	Deemed-to-Satisfy Provisions	Performance Requirement G1P1 must be complied with. Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements G1P2 to G1P5 are satisfied by complying with G1D2 to G1D4. Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in	It is necessary to provide a performance solution that takes into account the requirements outlined in Part C2 of the NCC Volume 3 regarding the discharge of pumped water from swimming pools.
NSW G1D2	Swimming pools	(1) A swimming pool with a depth of water more than 300 mm and which is associated with a Class 2 or 3 building or Class 4 part of a building, must have suitable barriers to restrict access by young children to the immediate pool surrounds in accordance with AS 1926.1 and AS 1926.2. (2) A water recirculation system in a swimming pool with a depth of water more than 300 mm must comply with AS 1926.3.	**Capable of Compliance:** The plans need to include details for the swimming pool barrier to ensure compliance with AS1926.1-2012 and AS1926.2-2007 standards for child safety and pool access prevention. A detailed assessment must be completed prior to issue of the relevant construction certificate. A detailed report on the circulation system, in compliance with AS1926.3-2010, must be submitted to ensure compliance with this clause.
G1D3	Refrigerated chambers, strong-rooms and vaults	Not applicable	Not applicable
NSW G1.101	Provision of cleaning windows	(1) A building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level. (2) A building satisfies (1) where— 1. the windows can be cleaned wholly from within the building; or provision is made for the cleaning of the windows by a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.	**Capable of Compliance:** At the Construction Certificate stage, plans and specifications are to include details demonstrating compliance with the requirements of this clause.

Part G2 Boilers, pressure vessels, heating appliances, fireplaces, chimneys and flues

Clause		Design requirement	Compliance review
G2D2	Installation of appliances	The installation of a stove, heater or similar appliance in a building must comply with: (i) Domestic solid-fuel burning appliances – Installation: AS/NZS 2918. (ii) For boilers and pressure vessels: Specification G2.2.	Not applicable.
G2D3	Open fireplaces	a) Not applicable.	Not applicable.
G2D4	Incinerator rooms	a) Not applicable.	Not applicable.

Part G6 Occupiable Outdoor Areas

Note: Part G6 contains DtS provisions additional to those contained in Sections C, D, E, F and G for occupiable outdoor areas.

Clause		Design requirement	Compliance review
G6D1	Application of part	a) The Deemed-to-Satisfy Provisions of this Part apply to buildings containing an occupiable outdoor area in addition to the other Deemed-to-Satisfy Provisions of the BCA. b) The Deemed-to-Satisfy Provisions of this Part take precedence where there is a difference to the Deemed-to-Satisfy Provisions of Sections C, D, E, F and G. c) Except for G6.2, the Deemed-to-Satisfy Provisions of this Part do not apply to— (i) an occupiable outdoor area of a sole-occupancy unit in a Class 2 or 3 building, Class 9c building or Class 4part of a building; or (ii) an occupiable outdoor area with an area less than 10m^2.	**Capable of Compliance:** At the Construction Certificate stage, plans and specifications are to include details demonstrating compliance with the requirements of this clause.
G6D2	Fire hazard properties	1 Subject to (2), a lining, material or assembly in an occupiable outdoor area must comply with C2D11 as for an internal element. 2 The following fire hazard properties of a lining, material or assembly in an occupiable outdoor area are not required to comply with C2D11: (i) Average specific extinction area. (ii) Smoke-Developed Index. (iii) Smoke development rate. (iv) Smoke growth rate index (SMOGRA$_{RC}$).	**Capable of Compliance:** At the Construction Certificate stage, plans and specifications are to include details demonstrating compliance with the requirements of this clause.

3.7 Section H – Special use buildings

Not applicable.

4.7 Section J – Energy Efficiency

It should be noted that this building is located in Climate Zone 6, which is considered a mild temperate zone. Additionally, the assessment of the deemed-to-satisfy provisions of Section J, pertaining to energy efficiency, has been excluded from this assessment report.

4.0 Appendix A – Referenced documentation

The conclusions presented in this report are the result of a thorough examination of the architectural plans, Project No. 2021029 by Place Studio dated 03/09/2024. This assessment was conducted entirely from a desktop perspective.

Drawing Title	Drawing No.	Revision	Dated
GA - Basement Floor Plan	DA-2002	D	03/09/2024
GA - Ground Floor Plan	DA-2004	D	03/09/2024
GA - Level 01 Plan	DA-3000	C	03/09/2024
GA - Level 02 Plan	DA-3001	C	03/09/2024
GA - Level 03 Plan	DA-3002	C	03/09/2024
GA - Roof Plan	DA-3003	D	03/09/2024
Sections	DA-4000	D	03/09/2024
Driveway Ramp Section	DA-4001	C	03/09/2024
South & East Elevations	DA-5000	C	03/09/2024
Building A Elevations	DA-5001	C	03/09/2024
Building B Elevations	DA-5002	C	03/09/2024
Building C Elevations	DA-5003	C	03/09/2024
Materials Schedule	DA-9200	C	03/09/2024