STEVE WATSON
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Mixed use development at 50 Morisset Street Queanbeyan

BCA Assessment Report

Report 2023/2284 R1.1

Prepared for Lockbridge.

November 2023

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Verifier: David Cartwright

Disclaimer:

This report is based on a desktop audit of preliminary documentation only.
Details contained in the report address issues of significance to broad BCA compliance relevant to this stage of design resolution.

Executive Summary

An assessment of the proposed design for the Mixed use development at 50 Morisset Street Queanbeyan has been undertaken against the Deemed-to-Satisfy (DTS) provisions of the relevant sections of the Building Code of Australia and the applicable Building Regulations.

This report details the non-compliances identified that require either amendments to plans or a performance solution to satisfy the Performance Requirements of the BCA.

Summary of BCA parameters	
Building use	Mixed use development consisting of residential apartments, ground floor retail and associated carparking
Class of Occupancy	Class 2, 6 & 7a
Type of Construction Required	Type A
Rise in Storeys	10
Number of Storeys	10
Effective Height	27.39m (Level 9 RL600.09 - Level Ground RL 572.70)

The design is capable of complying with the requirements of the relevant sections of the Environmental Planning Assessment Act 1979, the Environmental Planning and Assessment Regulations 2000 and the Building Code of Australia 2022. Compliance is subject to resolution of the identified areas of non-compliance and compliance with the recommendations provided within the report.

Further detailed regulatory reviews will need to be progressively undertaken as designs advance and become more resolved to ensure compliance is achieved.

Whilst not precluding the issue of a Construction Certificate, it is noted that many detailed design issues are not indicated on the drawings. These issues are designated “Compliance Readily Achievable” in the *“Status”* column of the assessment in Section 12 of the report and should be resolved prior to construction.

Key issues which require additional details have been listed under Section 10.1 of this report and need to be clarified with SWP or the building certifier for the project prior to the issue of a construction certificate.

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1. Introduction

This report presents the findings of a preliminary assessment undertaken of the proposed design for the mixed use dvelopment at 50 Morisset Street Queanbeyan against the Deemed-to-Satisfy (DtS) provisions of Building Code of Australia BCA 2022 Volume 1.

It has been prepared by Steve Watson and Partners for Lockbridge.

2. Purpose

The purpose of this report is to provide an assessment of the design documentation against the current requirements of the BCA.

The assessment is undertaken for the purpose of, and to the extent necessary for, construction certification to be issued under the *Building Act 2004*, s. 28.

3. Scope and Limitations

3.1. Scope

The scope of this assessment is limited to the the design documentation referenced in Appendix A of this report.

3.2. Limitations

The following limitations apply to the assessment:

- The report considers matters of a significant nature only and should not be considered exhaustive.
- The plans are assessed to the extent necessary to issue a Building Approval under the *Building Act 2004*, s. 28. This means the design has been assessed to be capable of complying with the BCA without necessarily having all the detailed design completed at this stage.
- Details in regard to access for people with disabilities have been assessed to the extent of the deemed-to-satisfy provisions of the BCA/Premises Standard only. A detailed assessment against AS 1428 series, AS/NZS 2890.6 – 2009 and AS 4299 – 1995 is outside the scope of this report
- Generally, the assessment does not incorporate a detailed assessment of the requirements of the Australian Standards.
- Structural and services documentation have not been reviewed.
- Appraisals are limited to the provisions of the BCA and the Premises Standards. Other legislative requirements have not been considered. It does not address additional or specific requirements stipulated under other areas such as Safety in Design, Construction Safety, Disability Discrimination, Planning and Environment, Occupational Health and Safety, Health, Dangerous Goods, etc, which may impact on the design and use of the building. It is recommended that appropriate advice from suitably qualified consultants should be obtained for further information on these areas

4. National Construction Code BCA 2022 Volume 1: Building Code of Australia Class 2 to Class 9 Buildings

The National Construction Code (BCA) is a uniform set of technical provisions for the design and construction of buildings, structures and plumbing/drainage systems which is separated into 3 volumes. Volume 1 of the BCA is the Building Code of Australia (BCA) for Class 2 to 9 buildings which is the document to which the assessment in this report has been undertaken against. The BCA is legislated under The Act and specifies the Performance Requirements for the design and construction of Class 2 to 9 buildings that must be satisfied to achieve compliance. The Performance Requirements can only be satisfied by a Performance Solution, Deemed-to-Satisfy (DTS) solution or a combination of both.

5. Performance Solutions

The BCA is written in a performance format which allows performance based buildings. This has allowed for innovation and variation from the prescriptive deemed-to-satisfy requirements of the BCA, whilst maintaining the principle levels of health, safety and amenity of building occupants.

Performance solutions are generally adopted when a nominated deemed-to-satisfy provision appears inappropriate for the design, or when a proposed design varies from the prescriptive requirements of the BCA. Subsequently, a performance solution supported by Fire Engineering analysis can determine whether a proposed design that varies from prescriptive requirements, will satisfactorily meet the performance provisions of the BCA. Ultimately, it is with the discretion of the relevant building surveyor whether to accept a deviation from the prescriptive code requirements.

Utilising the performance provisions may result in more economical and somewhat safer building, however alternative solutions may require additional on-going maintenance. It is in this instance that all parties, such as the building owner, insurance companies, proposed tenants, etc., are aware of this decision-making process and are kept informed of any additional requirements needed to maintain the level of safety.

6. Statutory Framework

The following table summarises the key statutory issues relating to fire safety and the BCA in relation to the certification of new building works:

Issue	Legislative reference	Comment
New Work	EPAR (DCFS) S19	All new works must comply
Residential Flat Development	EPAR (DCFS) S15 & S43	Statement from a qualified designer verifying compliance with SEPP65 for residential developments
BASIX	EPAR (DCFS) S10	BASIX certificate required for residential projects

6.1. New work

Section 19 of the EPAR (DCFS) requires that all new work comply with the current requirements of the BCA.

This means that all works proposed in the plans are required to comply but that existing features of an existing building need not comply with the BCA unless required to under other clauses of the legislation.

6.2. Residential flat development

Section 15 of the EPAR (DCFS) requires a qualified designer to provide a statement that verifies that the plans and specifications achieve or improve the design quality of the development having regard to the design quality principles set out in Part 2 of the *State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development* (SEPP 65) prior to the issue of a Construction Certificate. Section 43 of the EPAR (DCFS) requires a qualified designer to provide a statement that verifies that the residential flat development achieves the design quality of the development as shown in the plans and specifications having regard to the design quality principles set out in Part 2 of SEPP 65 prior to issuing an Occupation Certificate.

6.3. Fulfilment of BASIX Commitments

Section 10 of the EPAR (DCFS) requires the certifying authority to monitor fulfilment of any commitments listed on the BASIX certificate, where the BASIX certificate requires the certifying authority to monitor those commitments. A final occupation certificate must not be issued until the certifying authority is satisfied that each of the commitments has been fulfilled.

7. Methodology

7.1. Process adopted

The following method of assessment has been used in the preparation of this report:

(a) Determine the basic assessment data for the building.

(b) Assess the design of the building against the current Deemed-to-Satisfy requirements of Sections B, C, D, E, F, G, H and J of the BCA. Establish the status of each clause into the following categories:

1. Clause is administrative information only **(Noted)**;
2. Clause is or is not relevant to the proposed work **(Applicable or N/A)**
3. The proposed work complies with the requirements of the clause **(Complies)**;
4. Compliance with the requirements of the clause is unable to be determined from the documentation provided **(Compliance Readily Achievable)**. A recommendation in the "Comments"

column will indicate what is required to achieve compliance. The design and construction teams are responsible to ensure compliance is achieved;

5. Compliance with the requirements of the clause is unable to be determined from the documentation provided. Additional details or relevant information required to verify compliance (**Additional Details Required**);
6. Proposed work does not comply with the requirements of the clause **(Does Not Comply)**. An indication will be given in the Comments field as to the nature of the issue and whether an alternative solution has been proposed to address the issue;
7. Proposed work is to be addressed on a performance basis via an Alternative Solution satisfying the relevant Performance Requirements. (**Performance Solution**).

(c) Nominate the status of the design against each BCA requirement;

(d) Provide comments against each BCA requirement as appropriate.

8. Description of Proposed Development

The proposed development involves the construction of a ten (10) storey mixed use development.

The development includes:

- Residential apartments on Level Two (2) to Nine (9)
- Carparking and ancillary services on Level One (1)
- Retail tenancies, carparking and residential lobby on ground floor.

The development is located at 50 Morisset Street Queanbeyan.

9. Assessment Data Summary

The following basic assessment data has been drawn from the provisions of the BCA 2022 Volume 1.

Summary of BCA Parameters	
Building use	Mixed use development consisting of residential apartments, ground floor retail and associated carparking
Class of Occupancy	Class 2, 6 & 7a
Type of Construction Required	Type A
Rise in Storeys	10

Number of Storeys	10
Effective Height	27.39m (Level 9 RL600.09 - Level Ground RL 572.70)

9.1. Assumptions

Assumptions made in the preparation of this report are listed below:

1. Nil

9.2. Interpretations

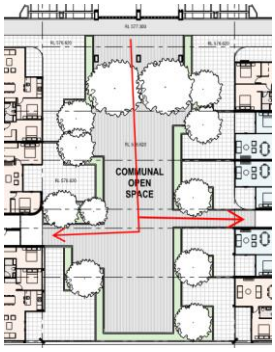
A number of issues within the BCA are recognised to be interpretive in nature. Where these issues are encountered, interpretations are made that are consistent with Standard Industry Practise and/or Steve Watson & Partners policy formulated in regard of each issue.

1. The basement carpark is not required to be provided with dedicated sanitary facilities to comply with Part F4 of the BCA as it is ancillary to the residential, commercial and retail uses of the building.

10. Issues Requiring Resolution

10.1. Issues requiring amendments to plans

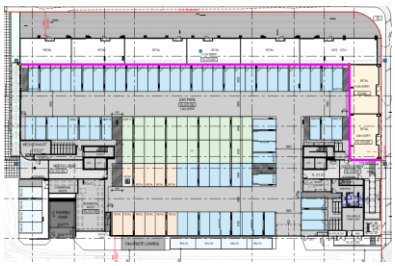
The following issues need to be resolved before issuing the Construction Certificate:

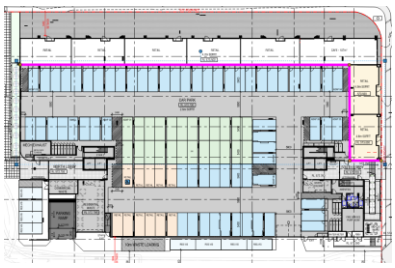
Item	DTS Clause	Description of Non-compliance	Requirement to Satisfy BCA
1.	**G6D4** (G6.4)	**Provision for escape** For the purposes of the Deemed-to-Satisfy Provisions of Part D1, a reference to a storey or room includes an occupiable outdoor area.	Egress requirements under Part D1 apply to occupiable outdoor areas. Confirm egress strategy from the communal open space. Egress back into the buildings will result in extended travel distances. Consultation with a fire engineer regarding potential performance solution allowances will likely be required. 

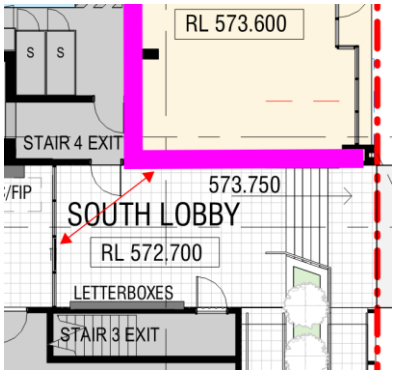
10.2. Items requiring additional details or documentation for the Construction Certificate

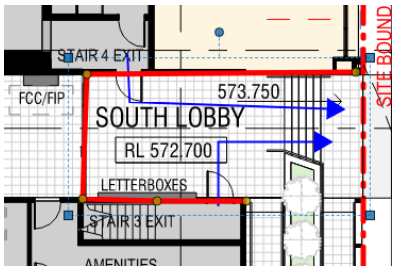
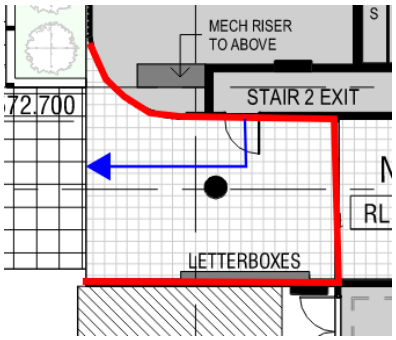
The following items have been identified which require further details or documentation to be provided to ensure compliance is achieved before issuing the Construction Certificate:

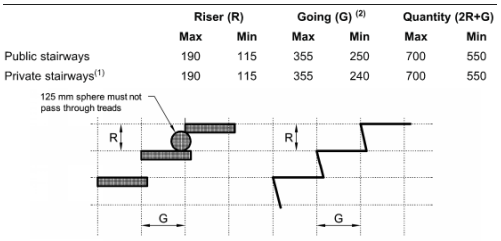
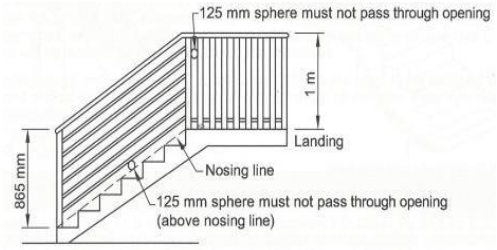
Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
1.	**Part B**	**Structural Provisions of the BCA**	Structural plans and an associated design certificate that have been prepared by a structural engineer are to be provided that verify compliance with the following: • BCA 2022 Volume 1 – Part B1 • Applicable Australian Standards. **Note 1:** NCC 2022 has adopted the following Australian Standard revisions – • AS 1170.2 – 2021 Structural design actions (Wind) • AS 4100 – 2020 Steel structures
2.	**B1D6** (B1.6)	**Construction of buildings in flood hazard areas** Applies to Class 2 buildings. If the building is located in a flood hazard area, it must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas.	Confirmation from a hydraulic engineer will be required as to whether the building is located within a floor hazard area as defined under the BCA.
3.	**C2D9** (C1.8)	**Lightweight construction** Lightweight construction used in a wall system must comply with Specification 6.	The architectural plans are to be updated to include the following items for review: • Wall setout plans. • A wall schedule that nominates the wall system manufacturer, wall system number (e.g. CSR123) and FRL. **Note 1:** From the 1 May 2023 test reports issued under previous versions of AS1530.4 will no longer be accepted under NCC 2022.
4.	**C2D10** (C1.9)	**Non-combustible building elements** In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: (a) External walls and common walls, including all components incorporated within them including façade covering, framing and insulation; (b) The flooring and floor framing of lift pits; (c) Non-loadbearing internal walls where they are required to be fire-resisting; (d) Non-loadbearing shaft being a lift, ventilating, garbage or similar shaft. The requirements above, do not apply to the following: (a) Gaskets (b) Caulking (c) Sealants (d) Termite management systems (e) Glass, including laminated glazing. (f) Thermal breaks associated with glazing and external wall systems, where the thermal breaks are no larger than necessary and do	Since the building attracts **Type A** construction, external walls and all components incorporated within them are required to be non-combustible. The architect is to complete SWP's external wall disclosure statement (**n.b.** this will provided in SWP's design certificate package). In addition, test certificates are to be provided for the external cladding, sarking and insulation that verify their compliance with the following as required: • BCA 2022 Vol 1 Clause C2D10. • AS 1530.1-1994. • AS/NZS 1530.3-1999.

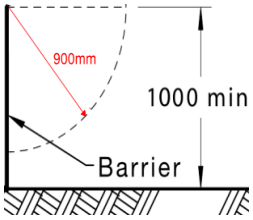
Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
		not extend beyond one storey / fire compartment. (g) Damp proof courses (h) Compressible fillers and backing materials associated with articulation joints no wider than 50 mm. (i) Isolated construction packers (j) Isolated blocking for fixtures. (k) Acoustic mounts (l) Waterproofing materials applied to the external face of below ground walls. (m) Reinforcing tape not greater than 50 mm. (n) Weather sealing materials applied to gaps no greater than 50 mm. (o) Wall ties and other masonry components. (p) A paint or lacquer. (q) Adhesive, including tape for cladding systems. (r) Fire protective materials required for the protection of penetrations.	
5.	**C2D14** (C1.14)	**Ancillary elements** An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is non-combustible or as specified under this clause.	Ancillary elements (e.g. signage, awnings and canopies) fixed to the building's external walls must— • be constructed wholly of non-combustible materials or meet the relevant requirements of Specification 7 for an internal element • not serve an exit, where it would render the exit unusable in a fire. The architect is to confirm whether these elements are proposed. If so, relevant test reports are to be provided for review.
6.	**C3D3** (C2.2)	**General floor area and volume limitations** **(Type A construction)** The floor area and volume limitations are: Class 6: 5,000m^2 and 30,000m^3 **Note:** • The BCA does not require Class 2 parts of the building to be considered.	The ground floor retail tenancies are to be fire separated from the remainder of the ground floor. See fire wall line below to ensure ground floor retail fire compartments size complies.  Refer to Appendix C3D3 of this report for floor areas and volumes.
7.	**C3D8** (C2.7)	**Separation by fire walls** A fire wall must extend to the underside of a floor	The fire wall separating the ramp on ground floor is to comply with C2.7 requirements

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
		having an FRL required for a fire wall or the roof covering.	including extending to the underside of the slab of the floor above. Details of compliance will be required for the Construction Certificate. 
8.	**C3D9** (C2.8)	**Separation of classifications in the same storey** As the building has parts of different classifications located alongside one another in the same storey each building element must have the higher FRL prescribed in Specification 5 of the BCA or the parts must be separated by a fire wall.	The Class 6 retail fire wall and FRLs on ground floor will attract a 3 hour FRL. Any proposal to reduce the retail FRL to 2 hours will require a performance solution from a fire safety engineer.
9.	**C3D10** (C2.9)	**Separation of classifications in different storeys** As different classifications are situated one above the other in adjoining storeys they must be separated in accordance with the DTS provisions of the BCA.	The Class 6 retail on ground floor will attract a 3 hour FRL which will apply to the slab above and below the ground floor storey. Any proposal to reduce the retail FRL to 2 hours will require a performance solution from a fire safety engineer.
10.	**C3D13** (C2.12)	**Separation of equipment** Two-hour fire enclosure is required for: • lift motor rooms • emergency generators sustaining emergency equipment operating in emergency mode • central mechanical smoke control plant • boilers • a battery system installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more.	Confirm if any equipment listed in this clause will be present within the building.
11.	**C3D14** (C2.13)	**Electricity supply system** A substation located within a building or main switchboard, which sustains emergency equipment, must be separated from the remainder of the building by 2hr fire rated construction. Switchboards sustaining emergency equipment must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of faults.	Confirm whether a substation will be provided within the building. The main switchboard which serves emergency equipment such fire hydrant booster pumps, sprinkler pumps, control and indicating equipment is to be confirmed. All rooms containing the above is to be separated from the remainder of the storey by construction that achieves an FRL of 120/120/120. The architectural plans are to be updated to include the following items for review: • Wall setout plans. • A wall schedule that nominates the wall system manufacturer, wall system number (e.g. CSR123) and

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
			FRL. • A door schedule that nominates the doors serving the room are self-closing and achieve an FRL not less than -/120/30.
12.	**C4D4** (C3.3)	**Separation of external walls and associated openings in different fire compartments** External walls within the distances specified in Table C4D4 of the BCA are to be protected by construction with an FRL not less than 60/60/60 and the associated openings protected in accordance with Clause C4D5 of the BCA. Table C4D4: Distance between external walls and associated openings in different fire compartments Angle between walls / Minimum distance (m) 0° (walls opposite) / 6 more than 0° to 45° / 5 more than 45° to 90° / 4 more than 90° to 135° / 3 more than 135° to less than 180° / 2 180° or more / Nil	The highlighted portion of the external wall in opposing fire compartments is to have a FRL 60/60/60 for a distance of 4m apart (see diagram below). No openings permitted unless they can protected in accordance with C4D5 requirements. 
13.	**C4D9** (C3.8)	**Openings in fire-isolated exits** -/60/30 self-closing fire doors are required to doorways providing access to fire isolated stairways. A window or other opening in the external wall of the fire isolated exit is to be protected in accordance with Clause C4D5 if it is within 6m of, and exposed to, a window or other opening in the wall of the same building.	A door schedule that nominates the proposed FRL of applicable doors and associated self-closing mechanisms is to be provided for review.
14.	**C4D12** (C3.11)	**Bounding construction: Class 2, 3, 4 and 9 buildings** Doorways opening to public corridors are to be protected with self-closing -/60/30 fire doors.	A door schedule that nominates the proposed FRL of applicable doors and associated self-closing mechanisms is to be provided for the Construction Certificate.
15.	**S5C11**	**Type A fire-resisting construction – fire-resistance of building elements** a) All elements must achieve the FRL specified in Table 3. b) Internal walls requiring an FRL must extend to the underside of the floor above, to the roof, or to the underside of a ceiling with resistance to the incipient spread of fire of not less than 60 minutes. c) Loadbearing internal walls (including shafts) and fire walls must be constructed from masonry, concrete or fire-protected timber that complies with this clause. d) The FRLs for external columns also apply to internal columns facing and within 1.5 of a window that is exposed to a fire source feature.	Structural plans and an associated design certificate that have been prepared by a structural engineer are to be provided for review, which includes certification for all— • structural elements • concrete and masonry elements that are required to achieve an FRL. The architectural plans are to be provided for all non-loadbearing (lightweight) walls requiring and FRL. Plans to include the following items for review: • Wall setout plans. • A wall schedule that nominates the wall system manufacturer, wall system number (e.g. CSR123) and

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
			FRL. The junctions of fire rated walls and facade and the floor slabs and facade will not maintain the required FRL and are to be designed on a performance basis. Details of the proposed method of fire separation at the junction of floors and the external wall and the junction of fire rated internal walls and the external wall are needed for review. Large scale details illustrating the method in which the tops of fire rated internal walls terminate in the top storey are needed for review.
16.	**D2D12** (D1.7)	**Travel via fire-isolated exits** Where the path of travel from the point of discharge of the fire-isolated stairways involves passing within 6m of the external wall of the same building the part of the wall must have: - • An FRL of 60/60/60; and • Any opening protected in accordance with C3.4.	Path of travel from Stair 2, 3 and 4 passes within 6m of the external walls and openings of the building. Details of protection to be provided for the construction certificate.  
17.	**D3D14** (D2.13)	**Going and risers** To provide safe passage, stairways must comply with the following: • minimum 2 risers / maximum 18 in each flight • risers 115mm min 190 mm max - going 250mm min 355mm max - 2R+G 550mm min 700mm max. • Adjacent risers, or between adjacent goings a variation no greater than 5mm is permitted and the largest and smallest riser within the flight or the	Stair sections are to be provided for review for the Construction Certificate.

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
		largest and smallest going within a flight is not to exceed a variation of 10mm. • Under the requirements of AS1428.1-2009 open riser are not permitted. • All treads to be fitted with non-slip finish or non-skid strips. • Treads are required to have a surface or nosing strip with a slip-resistance classification not less than listed in Table D3D15 when tested in accordance with AS 4586  Riser (R) / Going (G) [2] / Quantity (2R+G) Max / Min / Max / Min / Max / Min Public stairways: 190 / 115 / 355 / 250 / 700 / 550 Private stairways[1]: 190 / 115 / 355 / 240 / 700 / 550 	
18.	**D3D15** (D2.14)	**Landings** Ramps Surfaces, stair tread surfaces or nosing strips, and stair landing surfaces, or landing nosing strips to a flight below, must achieve slip-resistance classifications to AS4586-2013 as follows: **Application** / **Dry Surface Conditions** / **Wet Surface Condition** 1:14 or steeper ramps: P4 or R11 / P5 or R12 Ramps of 1:14 to 1:20: P3 or R10 / P4 or R11 Tread or Landing Surface: P3 or R10 / P4 or R10 Nosing Strip or Landing Strip: P3 / P4	Stair sections are to be provided for review for the Construction Certificate.
19.	**D3D17** *(D2.16a, b & c)*	**Barriers to prevent falls** Requirements apply to the provision and design of barriers at locations where a person could fall 1m or more. Generally, 125mm maximum gap size limits apply between balusters or rails and a 1m minimum height applies, with alternate dimensions permitted in fire isolated stairs and industrial areas.  Where the level of the surface below is 4m or more, a balustrade or other barrier must not facilitate climbing of horizontal elements between 150mm and 760mm above the floor.	The architectural plans are to include balustrade details for review for the Construction Certificate. **Note 1:** Where the level of the surface below is 4m or more, a balustrade or other barrier must not facilitate climbing of horizontal elements between 150mm and 760mm above the floor. **Note 2:** If air conditioning condensing units are proposed on the balconies, they are to be positioned so that they do not act as a climbable element in accordance with AS 1926.1-2012.

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
		Climbable elements cannot be located within 900mm of the top rail of each balustrade where the fall is greater than 4m. This measurement is taken in an arc as seen in the extract below  	
20.	**D3D22** (D2.17)	**Handrails** Handrails to exits including parts of fire isolated exit serving an area required to be accessible to people with disabilities must comply with Clause 12 of AS1428.1, viz: • Handrails not to obstruct circulation space • 30-50mm diameter • 865-1000mm above nosing line of stairs • 865-1000mm above ramps and landings • Consistent height throughout • 50mm grip clearance and no obstructions to handhold • Continuous at internal (return) landings • Provided with handrail extensions and 180 degree curled ends	Handrail details to be confirmed by the access consultant. Handrails are to be provided in compliance with Clause D3.3 and include the following- **Non-Fire Isolated Stairways and Ramps** All stairs and ramps not used as an emergency exit are to have handrails installed on both sides that comply with Clause 10 & 11 of AS1428.1-2009 **Fire Isolated Stairways and Ramps** In Fire Isolated Stairways & Ramps a handrail is required to be installed to at least one side of stair flights and located not less than 865mm above the nosing's of stair treads and the floor surfaces of landings **Consistent Handrail Heights for all stairways** The height of the top of the handrail, measured at a height of between 865mm – 1000mm vertically from the stair nosing shall be consistent throughout the ramp (or stairs) and any landings. All stairs including fire stairs are required to be designed to comply with Clause 12 of AS1428.1 – 2009
21.	**D3D27** (D2.22)	**Re-Entry from Fire-Isolated Exits** Fire isolated stair doors must facilitate re-entry from within the stair back onto the floor on every 4th level at all times and on all levels in the event of a fire alarm, where serving a health care or aged care building or where the exit stair serves a storey above 25m in effective height. Doors of fire-isolated exits must not be locked from the inside of a fire-isolated exit, unless:	Details of compliance to be provided for the construction certificate.

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
		Option 1 • All doors are fitted with a fail-safe device that automatically unlocks the door upon activation of a fire alarm; **AND** • On at least every fourth storey, the doors are not able to be locked at all and are sign posted stating re-entry is available at that level. Option 2 • All doors are fitted with a fail-safe device that automatically unlocks the door upon activation of a fire alarm; **AND** • An intercommunication or audible/visual alarm system is provided within the stair to assist persons who may accidentally be locked within the stair.	
22.	**D3D29** (D2.24)	**Protection of openable windows** Windows serving a residential bedroom or serving an early childhood centre must be protected where the floor is 2m or more above the external surface below. Window openings must be provided with protection if the floor below the window is 2m or more above the surface beneath in the bedrooms of Class 2 or 3 buildings or Class 9b early childhood centre. Where the window sill is below 1.7m above the floor level, the openable portion of the window must be protected with • a device to restrict the window opening or • a screen with secure fittings A device or screen required must: • not permit a 125mm sphere to pass through the window opening or screen; and • resist an outward horizontal action of 250N against the window restrained by a device or screen protecting the opening and have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden. Where the fall distance from the floor to the surface below is 4m or more or where a release device occurs to a required screen, an additional barrier at 865mm above floor level is required and must be non-climbable with gaps no greater than 125mm between elements.	The proposed mechanisms for restricting window openings in the following locations are to be detailed as part of the window schedule: • bedroom windows in Class 2 SOUs where the floor below the window is 2 m or more above the surface beneath and the lowest level of window opening is less than 1.7 m above FFL • openable windows greater than 4 m above the surface beneath (**n.b.** window sills require to be a minimum height of 865 mm above the FFL). Refer to Appendix D3D29 for additional information.
23.	**Part D4**	**Requirement for Access for people with disabilities**	An accessibility report prepared by an accredited access consultant is to be provided that verifies the design complies with the following: • BCA 2022 Vol 1 – Part D4 • AS 1428.1—2009 • AS/NZS 2890.6—2009.
24.	**E1D2** (E1.3)	**Fire hydrants** The building requires a fire hydrant system in accordance with AS 2419.1 – 2021, including -	Hydraulic plans and an associated design certificate prepared by a hydraulic engineer are to be provided for review. Please note that the

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
		1. The protection requirements of clause 3.5.5.2 (radiant heat barrier) do not apply to external fire hydrants located not more than 10 m from the building, provided the building is sprinkler protected throughout by a sprinkler system or a combination of sprinkler system conforming to AS 2118.1, AS 2118.4, AS 2118.6, FPAA101D or FPAA101H.	design certificate is required to state that the design complies with the following: • BCA 2022 Vol 1 Clause E1D2 • AS 2419.1—2021 • AS 2118.6—2012 (if applicable). **Note 1:** NCC 2022 has adopted the following Australian Standard revisions: • AS 2419.1-2021 – Fire hydrant systems **Note 1:** All parts of the floor shall not be more than **40 m** from an internal fire hydrant, if the travel distances throughout the building are in compliance with the DTS provisions of the NCC, coverage may be extended to **45 m.** **Note 3:** Since the building has an effective height of greater than 25 m, the fire hydrant system is required to be installed in a ring main configuration.
25.	**E1D3** (E1.4)	**Fire hose reels** Fire hose reel coverage to AS 2441—2005 is required to the Class 7a carpark and Class 6 retail area. Hose reels are not required to serve the Class 2 residential areas.	Hydraulic plans and an associated design certificate prepared by a hydraulic engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E1D3. AS 2441—2005.
26.	**E1D5** (E1.5)	**Where sprinklers are required: all classifications** Fire Sprinklers are required throughout all buildings if any part of the building exceeds an effective height of 25 m.	Fire services plans and an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E1D6, Specification 17 and Specification 18. • AS 2118.1—2017. • AS 2118.6—2012 (if applicable). **Note 1:** Euro-style laundries are to be provided with sprinkler coverage, noting that ACTF&R do not consider these areas as cupboards and the concession provided by Clause 5.9.17 of AS 2118.1—2017 cannot be applied.
27.	**E1D9** (E1.5)	**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.	Fire services plans and an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E1D9, Specification 17. • AS 2118.1—2017. • AS 2118.6—2012 (if applicable).

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
28.	**E1D14** (E1.6)	**Portable fire extinguishers** Portable fire extinguishers are to be provided in accordance with clause E1D14 and AS 2444—2001 in the following locations: • Emergency services switchboards. • Class 2, 3 or 4 residential areas are to be protected by 2.5 kg ABE type fire extinguishers located in common areas on the storey served and located not more than 10 m from each sole occupancy unit entry door.	Fire services plans an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E1D14. • AS 2444—2001.
29.	**E1D15** (E1.8)	**Fire control centre** A fire control centre for Fire Indicator, Fire Fans Control and Emergency Intercom panels is required for buildings of over 25m in effective height at a location readily available for firefighting operations and located. Fire control centre is required to comply with clauses S19C3 to C19C6 of Specification 19.	Fire services plans and an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with – BCA 2022 Vol 1 Clause E1D5 and Specification 19.
30.	**E1D17** (E1.10)	**Provisions for special hazards** ACT Fire & Rescue have introduced Fire Safety Guideline (FSG-22) dealing with Electric Vehicles (EV) and EV Charging Equipment within the Built Environment. Any building/project containing a carpark (Class 7a building or part of a building), the completion of a Risk Assessment in the form of a 'Special Hazard Report' to be submitted to ACTF&R as part of the Building Approval process. The Special Hazard Report is to identify the risks associated with the presence or potential presence of EV's and/or EV Charging facilities within the subject building, and determine the required safety measures to mitigate these risks so far as is reasonably practicable (SFAIRP). As such the Special Hazard Report is to be prepared by person/s qualified or with experience in Fire Safety, Risk Assessment and Electric Vehicles. The Risk Assessment is required to generally follow the principles and framework of ISO 31000 – Risk Management Guidelines. The Special Hazard Report may be provided as a separate report, as part of the PBDB or PBDR. However, support for Performance Solutions provided within the PBDB may be rescinded on review of a subsequently provided Special Hazard Report. As a relevant stakeholder ACTF&R will engage in the consultation process to assist in determining the level of risk and mitigation strategies applied, to establish what is considered reasonably practicable (SFAIRP).	The projects Fire Safety Engineer is to develop a Special Hazard Risk Assessment Report to be submitted to ACTF&R for their approval. Evidence of ACTF&R acceptance of the report is to be provided to SWP.
31.	**E2D3** (E2.2)	**General requirements** Air handling plant not forming part of a smoke hazard management system must be installed to operate as a zoned smoke control system under AS1668.1, or should shut down in fire mode and be fitted with dampers to prevent smoke spread if the air handling system recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly	Details of the mechanical handling system will be required for review to determine compliance. Ground floor mechanical design to be provided for review.

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
		contribute to the spread of smoke from one fire compartment to another fire compartment. Note: Each sole-occupancy unit in the Class 2 portion is treated as a separate fire compartment for the purposes of this clause.	
32.	**E2D4**	**Fire Isolated Exits** 1. A part of a building listed in (2) must be provided with – a) An automatic air pressurisation system in accordance with AS 1668.1 b) Open access ramps or balconies in accordance with D3D6. 2. The requirements of (1) apply to a required fire-isolated stairway – a) Serving a storey above an effective height of 25 m.	All fire stairs are required to be provided with a stair pressurisation system in accordance with AS 1668.1 Mechanical services plans and an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E2D4, Specification 20. • AS 1668.1—2015.
33.	**E2D5** (E2.2a)	**Buildings more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building** The Class 2 portion requires an automatic smoke detection and alarm system complying with Specification 2 to be provided.	Fire services plans and an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E2D5, Specification 20. • AS 1670.1—2018
34.	**E2D12** (E2.2a)	**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	Fire services plans and mechanical service plans an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E2D12 • AS 1668.1—2015. • AS 1670.1—2018
35.	**E3D3** (E3.2)	**Stretcher facility in lifts** Buildings greater than 12m in effective height require a lift sized to accommodate a stretcher of 2m x 0.6m x 1.4m high. The lift must serve every level to which lift access is provided.	Since the passenger lifts serve a storey with an effective height greater than 12 m, the lifts will need to be able to accommodate a space for a stretcher that is not less than 600 mm wide x 2000 mm long x 1400 mm high above the floor level.
36.	**E3D5** (E3.4)	**Emergency lifts** Emergency lifts of prescribed size, operation and fire isolation are required in buildings where: • the building has an effective height over 25m. Where more than two passenger lifts serve a storey, two emergency lifts must be provided, and these must be in separate shafts if multiple lift shafts occur. The following requirements apply to an emergency lift: • Must serve all storeys served by a passenger lift. Must be contained in a fire rated shaft.	Emergency lifts are required within the building. A design certificate prepared by the lift manufacturer is to be provided for review that verifies compliance with – • BCA 2022 Vol 1 Part E3 and Specification 24.
37.	**E4D2**	**Emergency lighting requirements**	Electrical plans and an associated design

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
	(E4.2)	Emergency lighting is to be provided throughout the building in the following locations: • Every fire-isolated stairway, fire-isolated ramp or fire-isolated passageway. • Every passageway, hallway, corridor or the like, that is part of the path of travel to an exit. • In every room having a floor area more than 100 m^2 that does not open to a corridor or space that has emergency lighting or to a road or open space. • In any room having a floor area more than 300m^2. • In every required non-fire isolated stairway. • To every room or space that has public access in a Class 6 building if— ○ the floor area is more than 300 m^2 ○ any point on the floor is more than 20 m from the nearest doorway opening directly to the road or open space; or ○ the egress involves a vertical rise within the building of more than 1.5 m.	certificate prepared by an electrical engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clauses E4D2 and E4D4. • AS/NZS 2293.1—2018.
38.	**E4D5** (E4.5)	**Exit signs** • Exit signage must comply with AS/NZS 2293.1—2018. • Exit signs must be clearly visible to person approaching the exit and must be installed on, above or adjacent to the following: ○ A door providing direct egress from a storey to a stairway, passageway or ramp serving as a required exit. ○ A door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space. ○ A horizontal exit. ○ A door serving as or forming part of a required exit in a storey required to be provided with emergency lighting.	Electrical plans and an associated design certificate prepared by an electrical engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clauses E4D5, E4D6 and E4D8. • AS/NZS 2293.1—2018.
39.	**E3D5** (E3.4)	**Emergency lifts** Emergency lifts of prescribed size, operation and fire isolation are required in buildings where: • the building has an effective height over 25m. Where more than two passenger lifts serve a storey, two emergency lifts must be provided, and these must be in separate shafts if multiple lift shafts occur. The following requirements apply to an emergency lift: • Must serve all storeys served by a passenger lift. Must be contained in a fire rated shaft.	Emergency lifts are required within the building. A design certificate prepared by the lift manufacturer is to be provided for review that verifies compliance with – • BCA 2022 Vol 1 Part E3 and Specification 24.
40.	**E4D9** (E4.9)	**Emergency warning and intercom systems** An emergency warning and intercom system complying with AS 1670.4—2018 must be installed throughout the building.	An emergency warning and intercom system complying with AS 1670.4—2018 must be installed throughout the building.

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
41.	**F1D3** (F1.1)	**Stormwater drainage** Stormwater drainage must comply with AS/NZS 3500.3 – 2021.	Hydraulic plans and an associated design certificate prepared by a hydraulic engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause F1D3 • AS/NZS 3500.3—2021 **Note 1:** NCC 2022 has adopted the following standard revisions: AS/NZS 3500.3 – 2021.
42.	**F1D4** *(New)*	**Exposed joints** Exposed joints in the drainage surface of a roof, balcony or podium are to be treated in accordance with Section 2.9 of AS4654.2	Accompanying design certification that has been prepared by the architect or weatherproofing consultant is to be provided that states compliance with: BCA 2022 Clause F1D4 and AS 4654.2-2012.
43.	**F1D5** (F1.4)	**External above ground membranes** External waterproofing membrane systems for balconies, rooftop terraces and podiums must comply with AS 4654.1-2012 and AS 4654.2-2012.	Accompanying design certification that has been prepared by the architect **or** weatherproofing consultant is to be provided that verifies compliance with the following: • BCA 2022 Vol 1 Clause F1D5 • AS 4654.1-2012. • AS 4654.2-2012.
44.	**F2D4** *(F1.11)*	**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, the minimum continuous fall of a floor plane to the waste must be 1:80; and the maximum continuous fall of a floor plane must be 1:50.	Architectural and Hydraulic plans are to illustrate floor wastes to the bathroom and laundries located within class 2 sole-occupancy units. Details of proposed falls within bathrooms to be provided on plan.
45.	**F4D4** (F2.3)	**Facilities in Class 3 to 9 buildings** Toilet facilities are required in appropriate numbers based on the number of persons accommodated.	Confirm proposed common sanitary facilities proposed to serve ground floor retail tenancies.
46.	**F4D5** (F2.4a)	**Accessible sanitary facilities** At each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females. An accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and Where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and Where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of	An accessibility report prepared by an accredited access consultant is to be provided that verifies the design complies with the following: • BCA 2022 Vol 1. • AS 1428.1—2009.

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
		those locations.	
47.	**F4D6** (F2.4b)	**Accessible unisex sanitary compartments** The minimum number of accessible unisex sanitary compartments is as follows: • 1 on every storey containing sanitary compartments; and Where a storey has more than one bank of sanitary compartments, at not less than 50% of those banks.	Details of a unisex accessible sanitary compartment serving the retail tenancies is to be provided. An accessibility report prepared by an accredited access consultant is to be provided that verifies the design complies with the following: • BCA 2022 Vol 1. • AS 1428.1—2009.
48.	**F6D3** (F4.2)	**Methods and extent of natural lighting** Natural light is required to be provided to 10% of the floor area of a habitable room through windows or 3% of the floor area from roof lights. Windows required for natural light that face the boundary or a wall of the same building are to be a least 1m in distance or 50% of the square root of the exterior height of the wall in which the window in located, which is greater.	Natural lighting calculations prepared by the architect for habitable rooms located within residential SOUs are to be provided for review. **Note 1:** *Floor area* in relation to a room is the area of the room measured within the finished surfaces of the walls, and includes the area occupied by any cupboard or other built-in fixture, fixture or fitting.
49.	**F6D5** (F4.4)	**Artificial lighting** The artificial lighting system must comply with AS/NZS 1680.0—2009.	Electrical plans and an associated design certificate prepared by an electrical engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause F6D5. • AS/NZS 1680.0—2009.
50.	**F6D7** (F4.6)	**Natural ventilation** Natural ventilation in accordance with F4.5 is required to consist of permanent openings, windows, or other devices which can be opened- • With an aggregate opening or openable size not less than 5% of the floor area of the room required to be ventilated; and • Open to the- ○ suitably sized court, or space open to the sky; ○ an open verandah, carport, or the like; or an adjoining room in accordance with F4.	Confirm whether mechanical and natural ventilation is proposed to Class 2 habitable rooms.
51.	**F6D11** (F4.11)	**Carparks** Every storey of the carpark is be provided with a mechanical ventilation system in accordance with AS 1668.2—2012.	Mechanical plans and an associated design certificate prepared by a mechanical engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause F6D11 • AS 1668.2—2012.
52.	**F6D12** (F4.12)	**Kitchen local exhaust ventilation**	Assuming future retail tenancies are forecast to contain food and beverage tenancies with commercial kitchens. If so, mechanical plans and an associated design certificate prepared by a mechanical engineer are to be provided for review. The design certificate is required to verify

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
		A commercial kitchen must be provided with a kitchen exhaust hood complying with AS/NZS 1668.1—2015 and AS 1668.2—2012 where— • any cooking apparatus has a total maximum electrical power input exceeding 8 kW or a total gas power input exceeding 29 MJ/h; **or** the total maximum power input to more than one apparatus exceeds 0.5 kW electrical power or 1.8 MJ/hour gas, per m² of the room or enclosure.	compliance with the following: • BCA 2022 Vol 1 Clause F6D12. • AS/NZS 1668.1—2015. • AS 1668.2—2012. • AS 4254.2—2012. **Note 1:** Clause 6.2.2 of AS 1668.1—2015 requires that— • kitchen exhaust systems shall not serve more than one fire compartment. • shafts containing a kitchen exhaust duct serving one fire compartment shall not contain a kitchen exhaust duct serving another fire compartment. **Note 2:** The location of the kitchen exhaust discharge (Type B effluent) with a flow rate exceeding 1000 L/s shall be not less than 6 m from a property boundary, any boundary to a public street, any outdoor intake opening or any natural ventilation device or opening in accordance with Clause 3.10.3(c) of AS 1668.2—2012. Alternatively, the mechanical engineer is to demonstrate compliance with the C3.10.3 concessions.
53.	**Part F7**	**Acoustic requirements**	An acoustic assessment report that has been prepared by an acoustic consultant will need to be provided that verifies compliance with BCA 2022 Vol 1 Part F7.
54.	**F8D2** (F6.1)	**External wall construction** 1. Where a pliable building membrane is installed in an external wall it must: (a) comply with AS/NZS 4200.1; and (b) be installed in accordance with AS 4200.2; and (c) 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 or insulation layer is installed on the exterior side of the primary insulation layer on an external wall is must have a vapour permeance of not less than – (a) In climate zone 6, 7 and 8 1.14 ug/N.s. 3. 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.	The wall schedule is to nominate the proposed pliable sarking membrane, and the associated product test certificate/specifications are to be provided for review including the vapour permeance level.
55.	**G6D6** (G6.6)	**Fire fighting equipment** Except for Clause 7(b)(i) of Specification E1.5, for the purposes of the Deemed-to-Satisfy Provisions of Part E1, a reference to a storey includes an occupiable outdoor area.	Fire fighting equipment required under Part E1 to be designed to include occupiable outdoor areas. Details of fire hydrant coverage to the communal open space is to be demonstrated

Item	DTS	Description of Non-compliance	Requirement to Satisfy BCA
			for the Construction Certificate.
56.	**G6D8** (G6.8)	**Visibility in an emergency, exit signs and warning systems** For the purposes of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area.	Emergency lighting, exits signs and emergency warning and intercom systems to be designed to include occupiable outdoor areas. Details of compliance will be required for the Construction Certificate
57.	**Sec J**	**Energy efficiency measures** Energy efficiency measures are prescribed for the following building elements to limit energy consumption: • Building fabric • External glazing • Building sealing • Air movement. • Air-conditioning and ventilation systems. • Artificial lighting and power • Hot water supply • Access for maintenance	Assessment by an Energy Efficiency consultant is to be carried out and Section J Compliance Report provided for the Construction Certificate.

10.3. Performance solutions required

The non-compliances will need to be investigated as being addressed via performance solutions:

Item	Non-Compliance	DTS Clause	Description	Performance Requirement/s
Items to be addressed by the fire safety engineer				
1.	Number of exits to retail tenancies	D2D3	The retail tenancies have access to a single exit in lieu of two exits.	D1P4, E2P2
2.	Exit travel distances - residential levels	D2D5	On residential levels 2 to 9, the distance to a point of choice is up to 12 metres in lieu of 6 metres.	D1P4, E2P2
3.	Exit travel distances - carpark levels	D2D5	Class 7a car park on ground floor is up to 25 metres to a point of choice in lieu of 20m and 42 metres to the nearest exit in lieu of 40m.	D1P4, E2P2
4.	Exit travel distances - carpark levels	D2D6	Class 7a car park on ground floor is up to 75 metres between alternative exits in lieu of 60m.	D1P4, E2P2
5.	Discharge of fire stairs – covered area	D2D12	Stairs 2 and 4 discharge into covered areas not containing a height of 3m.	D1P4, E2P2
6.	Location of fire brigade booster assembly	E1D3	The fire brigade booster assembly is not located withinor affixed to the façade of the building containing the principal entrance.	E1P3
7.	Deletion of zone pressurisation to Class 6 portions	E2D6	Zone smoke control is proposed to be omitted from Class 6 tenancies on ground floor.	E2P2
Items to be addressed by the access consultant				
1.	Nil identified at this stage.			
Items to be addressed by the BCA consultant				

1.	Nil identified at this stage.			
Items to be addressed by the façade engineer				
8.	Weatherproofing of external walls and roof	F3D5	A performance solution report prepared by the architect or façade engineer is to be provided that— • states the façade complies with performance requirement F3P1. • lists the proposed external wall systems and includes any supporting documentation (e.g. CodeMark Certificate or an external wall system test report that demonstrates compliance with Verification Method F3V1).	F3P1
Items to be addressed by the hydraulic engineer				
1.	Nil identified at this stage.			
Items to be addressed by the mechanical engineer				
1.	Nil identified at this stage.			
Items to be addressed by the waterproofing consultant				
1.	Nil identified at this stage.			

11. Conclusion

The design is capable of complying with the requirements of the relevant sections of the of the Act and EPAR (DCFS) 2021, EPAR 2021 and the BCA 2022 Volume 1 subject to resolution of the identified areas of non-compliance and compliance with the recommendations provided within the report.

Further detailed regulatory reviews will need to be progressively undertaken as designs advance and become more resolved to ensure compliance is achieved.

12. BCA 2022 Volume 1 – Clause by Clause Assessment

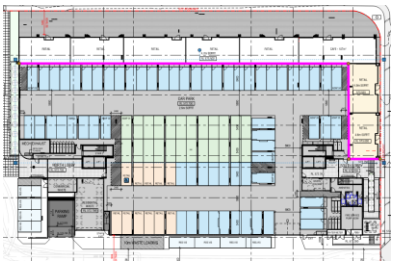
Clause	Description	Comment	Status
BCA Version			
BCA 2022 Vol 1	**BCA version** The BCA is generally updated every 3 years with amendments influencing health, safety and amenity features required within the building. Legislation typically allows future BCA changes to be ignored provided substantial progress on the design of the development has previously occurred.	This report assumes that the applicable BCA version is BCA 2022 Volume 1. In addition, requirements of the Premises Standards (PS) are covered as relevant.	Noted
Section A: General Provisions			
A5G3 (A5.2)	**Suitability of materials** Every part of a building must be constructed in an appropriate manner to achieve the requirements of the BCA, using materials that are fit for the purpose for which they are intended.	The builder is responsible to adopt and install appropriate proprietary accredited building products and is to ensure that those products/assemblies are fit for the purpose they are intended and are installed in accordance with the manufacturer's specifications/ requirements for that system.	Compliance Readily Achievable
Part A6	**Classification and usage** Usage on each level of the building is as follows: **LEVEL** / **USE** / **CLASS** Ground / Residential lobby / 2 Retail / 6 Carparking / 7a Level 1 / Carparking / 7a Levels 2 to 9 / Residential apartments / 2		Noted
Part A7	**United buildings** Buildings are deemed united when two or more buildings adjoining each other are connected and used as one building.	Note: Both towers sit on common podium and deemed one single building.	Noted
Section B: Structure			
Part B1 – Structural Provisions			
Part B	**Structure and importance level** Assessment of the building structure will be required for dead, live, wind, earthquake, fire and other loads required by current day AS Codes. The design of the structure must be based on the appropriate 'Importance Level' under BCA Table B1D3a.	The building has an importance level 3 in accordance with Table B1D3a	Noted

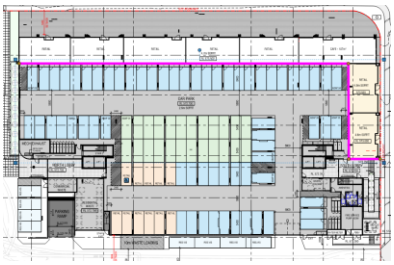
Clause	Description	Comment	Status
B1D2 (B1.1)	**Resistance to actions** The resistance of the building must be greater than the most critical action effect resulting from different combinations of actions	Structural plans and an associated design certificate that have been prepared by a structural engineer are to be provided that verify compliance with the following: • BCA 2022 Volume 1 – Part B1 • Applicable Australian Standards. **Note 1:** NCC 2022 has adopted the following Australian Standard revisions – • AS 1170.2 – 2021 Structural design actions (Wind) • AS 4100 – 2020 Steel structures	Additional Details Required
B1D3 (B1.2)	**Determination of individual actions** The magnitude of individual actions must be determined in accordance with Clause B1D3 of the BCA.	Structural plans and an associated design certificate that have been prepared by a structural engineer are to be provided that verify compliance with the following: • BCA 2022 Volume 1 – Part B1 • Applicable Australian Standards. **Note 1:** NCC 2022 has adopted the following Australian Standard revisions – • AS 1170.2 – 2021 Structural design actions (Wind) • AS 4100 – 2020 Steel structures	Additional Details Required
B1D4 (B1.4)	**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 relevant Australian Standards in accordance with Clause B1D4 of the BCA.	Structural plans and an associated design certificate that have been prepared by a structural engineer are to be provided that verify compliance with the following: • BCA 2022 Volume 1 – Part B1 • Applicable Australian Standards. **Note 1:** NCC 2022 has adopted the following Australian Standard revisions –	Additional Details Required

Clause	Description	Comment	Status
		• AS 1170.2 – 2021 Structural design actions (Wind) • AS 4100 – 2020 Steel structures	
B1D5 (B1.5)	**Structural software** Structural software used in computer aided design of a building or structure that uses design criteria based on DTS provisions of the BCA must comply with the ABCB Protocol for Structural Software.	-	Noted
B1D6 (B1.6)	**Construction of buildings in flood hazard areas** • Applies to Class 2 buildings. • If the building is located in a flood hazard area, it must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas.	Confirmation from a hydraulic engineer will be required as to whether the building is located within a floor hazard area as defined under the BCA.	Additional Details Required
Spec. 4	**Design of building in cyclonic areas** Buildings determined to be located in wind regions C and D in accordance with AS/NZS 1170.2 are to meet the requirements of this specification.	The Australian Capital Territory is located in wind region A3 determined in accordance with Figure 3.1(A) of AS 1170.2 – 2011.	N/A
Section C: Fire Resistance			
Part C2 – Fire Resistance and Stability			
C2D2 (C1.1)	**Type of construction required** Type A fire resisting construction is required.	Applicable building elements are required to achieve FRLs in accordance with Appendix Specification 5. Refer to Specification 5 assessment further below in the report.	Applicable
CD23 (C1.2)	**Calculation of rise in storeys** **Effective Height / Calculation of rise in storeys**. Rise in storeys is a defined BCA term addressing the number of main building levels excluding basements. Effective height is defined under the BCA as vertical distance between the floor of the lowest storey included in the calculation of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units). These parameters influence the BCA provisions applicable to the building.	The following parameters apply: **Rise in storeys:** 10 storeys **Effective Height:** 27.39 m	Noted
C2D4	**Buildings of multiple classification**		N/A

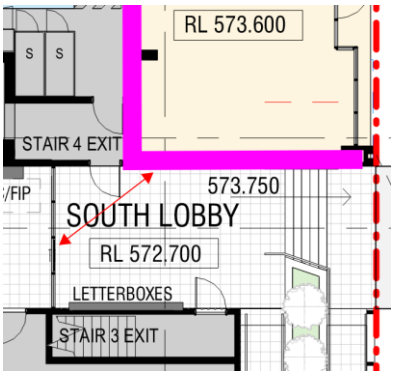
Clause	Description	Comment	Status
(C1.3)			
C2D5 (C1.4)	**Mixed types of construction**		N/A
C2D6 (C1.5)	**Two storey Class 2, 3 or 9c buildings**		N/A
C2D7 (C1.6)	**Class 4 parts of buildings**		N/A
C2D8 (C1.7)	**Open spectator stands and indoor sports stadiums**		N/A
C2D9 (C1.8)	**Lightweight construction** Lightweight construction used in a wall system must comply with Specification 6.	The architectural plans are to be updated to include the following items for review: • Wall setout plans. • A wall schedule that nominates the wall system manufacturer, wall system number (e.g. CSR123) and FRL. **Note 1:** From the 1 May 2023 test reports issued under previous versions of AS1530.4 will no longer be accepted under NCC 2022.	Additional Details Required
C2D10 (C1.9)	**Non-combustible building elements** In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: (e) External walls and common walls, including all components incorporated within them including façade covering, framing and insulation; (f) The flooring and floor framing of lift pits; (g) Non-loadbearing internal walls where they are required to be fire-resisting; (h) Non-loadbearing shaft being a lift, ventilating, garbage or similar shaft. The requirements above, do not apply to the following: (s) Gaskets (t) Caulking (u) Sealants (v) Termite management systems (w) Glass, including laminated glazing. (x) Thermal breaks associated with glazing and external wall systems,	Since the building attracts **Type A** construction, external walls and all components incorporated within them are required to be non-combustible. The architect is to complete SWP's external wall disclosure statement (**n.b.** this will provided in SWP's design certificate package). In addition, test certificates are to be provided for the external cladding, sarking and insulation that verify their compliance with the following as required: • BCA 2022 Vol 1 Clause C2D10. • AS 1530.1-1994. • AS/NZS 1530.3-1999.	Additional Details Required

Clause	Description	Comment	Status
	where the thermal breaks are no larger than necessary and do not extend beyond one storey / fire compartment. (y) Damp proof courses (z) Compressible fillers and backing materials associated with articulation joints no wider than 50 mm. (aa) Isolated construction packers (bb) Isolated blocking for fixtures. (cc) Acoustic mounts (dd) Waterproofing materials applied to the external face of below ground walls. (ee) Reinforcing tape not greater than 50 mm. (ff) Weather sealing materials applied to gaps no greater than 50 mm. (gg) Wall ties and other masonry components. (hh) A paint or lacquer. (ii) Adhesive, including tape for cladding systems. (jj) Fire protective materials required for the protection of penetrations.		
C2D11 (C1.10)	**Fire hazard properties** Floor materials, floor coverings and wall and ceiling lining materials need to comply with prescribed fire hazard properties. Refer to Appendix C2D11 & compliance with AS5637.1—2015.	Floor materials, floor coverings, wall linings and ceiling linings are to comply with the fire hazard properties nominated in Appendix C2D11.	Compliance Readily Achievable
C2D12 (C1.11)	**Performance of external walls in fire**		N/A
C2D13 (C1.13)	**Fire-protected timber: Concession**		N/A
C2D14 (C1.14)	**Ancillary elements** An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is non-combustible or as specified under this clause.	Ancillary elements (e.g. signage, awnings and canopies) fixed to the building's external walls must— • be constructed wholly of non-combustible materials or meet the relevant requirements of Specification 7 for an internal element • not serve an exit, where it would render the exit unusable in a fire. The architect is to confirm whether these elements are proposed. If so,	Additional Details Required

Clause	Description	Comment	Status
		relevant test reports are to be provided for review.	
C2D15 (New)	**Fixing of bonded laminated panels** In a building of Type A or Type B construction, externally located bonded laminated panels must have all layers of cladding mechanically supported or restrained to the supporting frame.	-	Compliance Readily Achievable
Part C3 – Compartmentation and Separation			
C3D2 (C2.1)	**Application of Part**	Clauses C3D3, C3D4 and C3D5 do not apply to a sprinkler protected carpark.	Applicable
C3D3 (C2.2)	**General floor area and volume limitations (Type A construction)** The floor area and volume limitations are: Class 6: 5,000m^2 and 30,000m^3 **Note:** • The BCA does not require Class 2 parts of the building to be considered. • The basement/ground carpark levels are not required to be considered as they're provided with a sprinkler system throughout.	The ground floor retail tenancies are to be fire separated from the remainder of the ground floor. See fire wall line below to ensure ground floor retail fire compartments size complies.  Refer to Appendix C3D3 of this report for floor areas and volumes.	Applicable
C3D4 (C2.3)	**Large isolated buildings**		N/A
C3D5 (C2.4)	**Requirements for open space and vehicular access**		N/A
C3D6 (C2.5)	**Class 9 buildings**		N/A
C3D7 (C2.6)	**Vertical separation of openings in external walls**	The building will be sprinkler protected to AS 2118.1.	N/A
C3D8 (C2.7)	**Separation by fire walls** A fire wall must extend to the underside of a floor having an FRL required for a fire wall or the roof covering.	The fire wall separating the ground floor retail tenancies is to comply with C2.7 requirements including extending to the underside of the slab of the floor above.	Additional Details Required

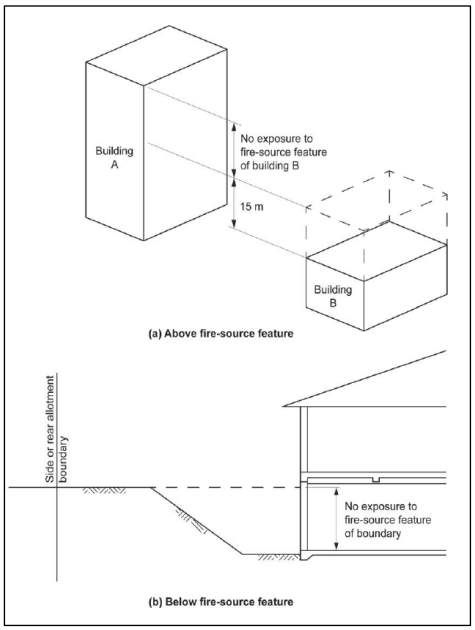
Clause	Description	Comment	Status
		Details of compliance will be required for the Construction Certificate. 	
C3D9 (C2.8)	**Separation of classifications in the same storey** As the building has parts of different classifications located alongside one another in the same storey each building element must have the higher FRL prescribed in Specification 5 of the BCA or the parts must be separated by a fire wall.	The Class 6 retail fire wall and FRLs on ground floor will attract a 3 hour FRL. Any proposal to reduce the retail FRL to 2 hours will require a performance solution from a fire safety engineer.	Additional Details Required
C3D10 (C2.9)	**Separation of classifications in different storeys** As different classifications are situated one above the other in adjoining storeys they must be separated in accordance with the DTS provisions of the BCA.	The Class 6 retail on ground floor will attract a 3 hour FRL which will apply to the slab above and below the ground floor storey. Any proposal to reduce the retail FRL to 2 hours will require a performance solution from a fire safety engineer.	Additional Details Required
C3D11 (C2.10)	**Separation of lift shafts** Lift shafts will require FRL's in accordance with Specification 5 for Type A construction. Openings for lift landing doors and services must be protected in accordance with the DTS provisions of Part C4 of the BCA. The emergency lifts are required to be within a two hour fire rated shaft.	-	Compliance Readily Achievable
C3D12 (C2.11)	**Stairways and lifts in one shaft**	Fire stairs and lift shown in separated fire isolated shafts.	Complies
C3D13 (C2.12)	**Separation of equipment** Two-hour fire enclosure is required for: • lift motor rooms • emergency generators sustaining emergency equipment operating in emergency mode • central mechanical smoke control plant • boilers • a battery system installed in the building that has a total voltage of 12 volts or	Confirm if any equipment listed in this clause will be present within the building.	Additional Details Required

Clause	Description	Comment	Status
	more and a storage capacity of 200 kWh or more.		
C3D14 (C2.13)	**Electricity supply system** A substation located within a building or main switchboard, which sustains emergency equipment, must be separated from the remainder of the building by 2hr fire rated construction. Switchboards sustaining emergency equipment must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of faults.	Confirm whether a substation will be provided within the building. The main switchboard which serves emergency equipment such fire hydrant booster pumps, sprinkler pumps, control and indicating equipment is to be confirmed. All rooms containing the above is to be separated from the remainder of the storey by construction that achieves an FRL of 120/120/120. The architectural plans are to be updated to include the following items for review: • Wall setout plans. • A wall schedule that nominates the wall system manufacturer, wall system number (e.g. CSR123) and FRL. • A door schedule that nominates the doors serving the room are self-closing and achieve an FRL not less than -/120/30.	Additional Details Required
C3D15 (C2.14)	**Public corridors in Class 2 & 3 buildings** Public corridors must be divided at intervals of not more than 40m by smoke-proof walls complying with Clause S11C2 of Specification 11.	Class public corridor are less than 40m in length.	Complies
Part C4 – Protection of Openings			
C4D2 (C3.1)	**Application of Part**		Applicable
C4D3 (C3.2)	**Protection of openings in external walls**	External walls located sufficient distance from from property boundaries.	N/A
C4D4 (C3.3)	**Separation of external walls and associated openings in different fire compartments** External walls within the distances specified in Table C4D4 of the BCA are to be protected by construction with an FRL not less than 60/60/60 and the associated openings protected in accordance with Clause C4D5 of the BCA.	The highlighted portion of the external wall in opposing fire compartments is to have a FRL 60/60/60 for a distance of 4m apart (see diagram below). No openings permitted unless they can protected in accordance with C4D5 requirements.	Additional Details Required

Clause	Description	Comment	Status
	Table C4D4: Distance between external walls and associated openings in different fire compartments Angle between walls / Minimum distance (m) 0° (walls opposite) 6 more than 0° to 45° 5 more than 45° to 90° 4 more than 90° to 135° 3 more than 135° to less than 180° 2 180° or more Nil		
C4D5 (C3.4)	**Acceptable method of protection** Window openings that are required to be protected are to be protected by internal or external wall wetting sprinklers with windows that are automatic closing or permanently fixed in the closed position, -/60/- fire windows that are automatic closing or permanently fixed closed or -/60/60 automatic closing fire shutters. Doorways are to be protected by internal or external wall wetting sprinklers used with doors that are self-closing or automatic closing, or -/60/30 self-closing or automatic closing fire doors. Other openings, excluding voids, to be protected with internal or external wall wetting sprinklers or construction having an FRL not less than -/60/-	Internal only if required by D2D12.	Noted
C4D6 (C3.5)	**Doorways in fire walls**		N/A
C4D7 (C3.6)	**Sliding fire doors**		N/A
C4D8 (C3.7)	**Protection of doorways in horizontal exits**		N/A
C4D9 (C3.8)	**Openings in fire-isolated exits** -/60/30 self-closing fire doors are required to doorways providing access to fire isolated stairways. A window or other opening in the external wall of the fire isolated exit is to be protected in accordance with Clause C4D5 if it is within 6m of, and exposed to, a window or other opening in the wall of the same building.	A door schedule that nominates the proposed FRL of applicable doors and associated self-closing mechanisms is to be provided for review.	Additional Details Required

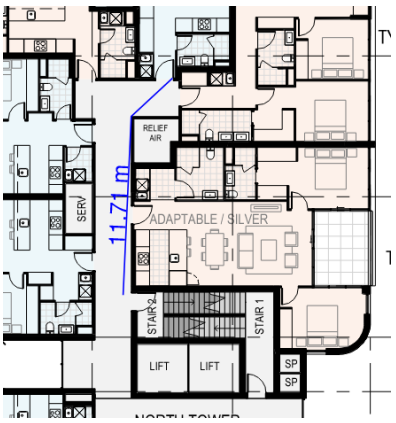
Clause	Description	Comment	Status
C4D10 (C3.9)	**Service penetrations in fire-isolated exits** Fire isolated exit must not be penetrated by any service other than - (a) electrical wiring for essential service installations (b) pressurisation ducts with an FRL of -/120/60, or (c) water pipes for fire services including test drainpipes.		Compliance Readily Achievable
C4D11 (C3.10)	**Openings in fire-isolated lift shafts** Openings in lift shafts are to be protected by -/60/- fire doors complying with AS1735.11. Lift indicator panels are to be backed by construction having an FRL of not less than -/60/60 if it exceeds 35,000mm^2 (175 X 200 mm).		Compliance Readily Achievable
C4D12 (C3.11)	**Bounding construction: Class 2, 3, 4 and 9 buildings** Doorways opening to public corridors are to be protected with self-closing -/60/30 fire doors.	A door schedule that nominates the proposed FRL of applicable doors and associated self-closing mechanisms is to be provided for the Construction Certificate.	Additional Details Required
C4D13 (C3.12)	**Openings in floors and ceilings for services** Services passing through floors are to be placed within fire resisting shafts or in accordance with Clause C4D15.	Services penetrations of fire rated structure generally need to be fire-stopped and/or located in fire rated riser shafts. Openings in fire rated elements need to be fire resisting to maintain the function of the elements.	Compliance Readily Achievable
C4D14 (C3.13)	**Openings in shafts** In a building of Type A construction, an opening in a wall providing access to a ventilating, pipe, garbage, or other service shaft must be protected by: • If it is a sanitary compartment - a door or panel which together with its frame, is non-combustible or has an FRL of not less than -/30/30, or • A self-closing -/60/30 fire door or hopper, or • An access panel with an FRL of not less than -/60/30, or • If the shaft is a garbage shaft - a door or hopper of non-combustible construction.	A door schedule that nominates non-combustible hopper doors serving garbage shafts is to be provided for review.	Compliance Readily Achievable
C4D15 (C3.15)	**Openings for service installations** Services penetrations through a building elements (other than an external wall or roof) that are required to have an FRL with respect to integrity or insulation or a resistance to the	Any system used must be a certified system and installed in accordance with the tested method. Specifications of the	Compliance Readily Achievable

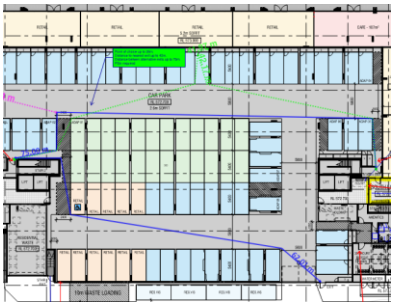
Clause	Description	Comment	Status
	incipient spread of fire, must comply with a tested system or with Specification 13. Methods and materials used are to be identical to tested prototypes and in accordance with AS4072.1 and AS1530.4, and having achieved the required FRL or resistance to the incipient spread of fire or other specified method, or differ from a prototype assembly of the service, building element and protection method in accordance with Section 4 of AS 4072.1 Ventilation and air-conditioning systems are to be installed in accordance with AS/NZS 1668.1.	methods of fire sealing need to be provided. **Note 1:** From the 1 May 2023 test reports issued under previous revisions of AS1530.4 will no longer be accepted under NCC 2022.	
C4D16 (C3.16)	**Construction Joints** Construction joints in elements required to have a fire resistance with respect to integrity and insulation must be protected.	Construction joints are to be installed in accordance with a tested prototype in accordance with AS1530.4.	Compliance Readily Achievable
C4D17 (C3.17)	**Columns protected with lightweight construction to achieve an FRL**		N/A
Specification 5 – Fire-resisting construction			
S5C1	**Scope**	-	Noted
S5C2	**Exposure to fire-source features** Shielding elements must have an FRL of not less than 30/-/-. Concessions apply for parts of external walls of another building 15m above the building concerned or if the exposed part is below the finished ground level at the property boundary.	-	Noted

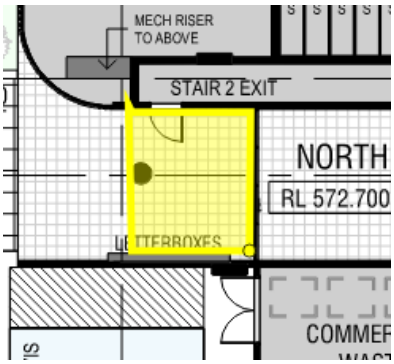
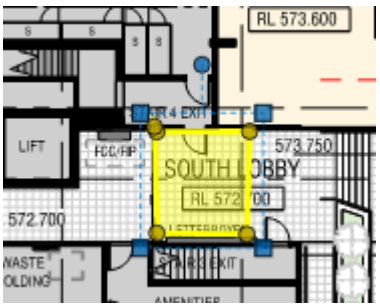
Clause	Description	Comment	Status
			
S5C3	**Fire protection for a support of another part** Supporting elements must generally maintain required FRLs unless a concession is available under this clause.	-	Noted
S5C4	**Lintels** A lintel must generally maintain the FRL required for the part of the building in which it is situated unless it can otherwise comply with this clause.	-	Noted
S5C5	**Method of attachment not to reduce the fire-resistance of building elements** The method of attaching or installing a finish, lining, ancillary element or service installation to a building element must not reduce the fire-resistance of that element to below that required.		Compliance Readily Achievable
S5C6	**General concessions** • (1) & (2) Concessions are applicable for some steel and timber columns in predominantly single storey buildings. • (3) Concessions are available for non-combustible rooftop plant enclosures. • (4) Curtain walls fully protected with external sprinklers do not require an FRL. • (5) Concessions are applicable for balconies not more than 2 storeys above ground that are not the only path of travel toward an exit.	Concessions apply to this building for the non-combustible rooftop plant enclosures.	Noted
S5C7	**Mezzanine floors: Concession**		N/A

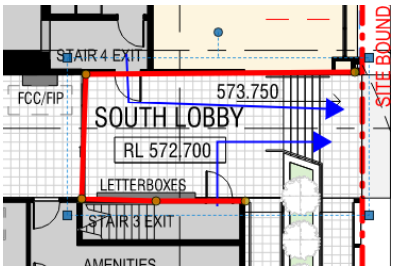
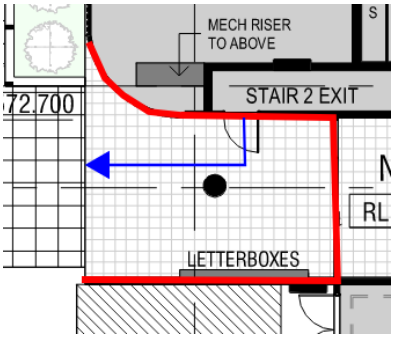
Clause	Description	Comment	Status
S5C8	**Enclosure of shafts** Shafts required to have an FRL must be enclosed at the top and bottom by construction have an FRL not less than that required for the walls of the shaft. Shafts, other than one enclosing a fire isolated stairway or ramp, do not require an FRL at the top if the shaft extends beyond the roof covering.	Large-scale sections illustrating how lightweight fire rated construction encloses the top of shafts or how the shafts extend beyond the roof covering per this clause are needed for review.	Compliance Readily Achievable
S5C9	**Carparks in Class 2 and 3 buildings**	Applies to Class 2 with 4 storeys or less.	N/A
S5C10	**Residential care building: Concession**		N/A
S5C11	**Type A fire-resisting construction – fire-resistance of building elements** e) All elements must achieve the FRL specified in Table 3. f) Internal walls requiring an FRL must extend to the underside of the floor above, to the roof, or to the underside of a ceiling with resistance to the incipient spread of fire of not less than 60 minutes. g) Loadbearing internal walls (including shafts) and fire walls must be constructed from masonry, concrete or fire-protected timber that complies with this clause. The FRLs for external columns also apply to internal columns facing and within 1.5 of a window that is exposed to a fire source feature.	Structural plans and an associated design certificate that have been prepared by a structural engineer are to be provided for review, which includes certification for all— • structural elements • concrete and masonry elements that are required to achieve an FRL. The architectural plans are to be provided for all non-loadbearing (lightweight) walls requiring and FRL. Plans to include the following items for review: • Wall setout plans. • A wall schedule that nominates the wall system manufacturer, wall system number (e.g. CSR123) and FRL. The junctions of fire rated walls and facade and the floor slabs and facade will not maintain the required FRL and are to be designed on a performance basis. Details of the proposed method of fire separation at the junction of floors and the external wall and the junction of fire rated internal walls and the external wall are needed for review.	Additional Details Required

Clause	Description	Comment	Status
		Large scale details illustrating the method in which the tops of fire rated internal walls terminate in the top storey are needed for review.	
S5C12	**Type A fire-resisting construction –concession for floors** Floors do not require an FRL if they are: a) Laid on the ground. b) In Class 2, 3, 5 or 9 buildings and the space below is not a storey nor used for ancillary purposes. c) Timber stage floors over a floor with the required FRL, where the space below is not used (e.g. store room). d) Within Class 2, 3 and 4 sole-occupancy units. e) Open-access and above a floor with the required FRL.		Noted
S5C13	**Type A fire-resisting construction – floor loading of Class 5 and 9b buildings: Concession**	-	N/A
S5C14	**Type A fire-resisting construction – roof superimposed on concrete slab: Concession** Roofs do not require an FRL if they are non-combustible and installed above a concrete slab roof with the required FRL.	-	Noted
S5C15	**Type A fire-resisting construction – roof: Concession** Roofs do not require an FRL if they are non-combustible and: a) The building is sprinkler protected; b) The building has a rise in storeys of 3 or less; c) Is a Class 2 or 3 building; or d) The building is less than 25m in effective height and a ceiling with a RISF60 is installed below the roof.	The concession is applicable on the basis that the building is of Class 2 fully sprinklered.	Compliance Readily Achievable
S5C16	**Type A fire-resisting construction – roof lights** Roof lights must: (a) Not occupy more than 20% of the roof area; (b) Be not less than 3m from a fire source feature, non-fire separated external walls projecting above, any roof light in an adjoining SOU or fire separated part of the building.	Roof lights on Level 9 in adjoining units are located a minimum of 3m from each.	Complies
S5C17	**Type A fire-resisting construction – internal columns and walls: Concession**	-	N/A
S5C18	**Type A fire-resisting construction – open spectator stands and indoor sports stadiums:**	-	N/A

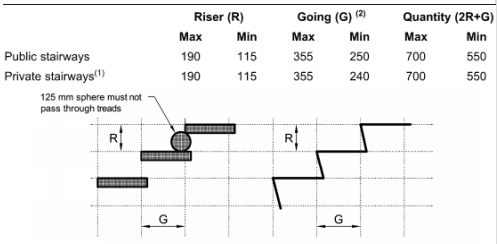
Clause	Description	Comment	Status
	Concession		
S5C19	**Type A fire-resisting construction – carparks** FRL concessions apply to sprinkler protected and open deck carparks that are separate buildings or otherwise fire separated per this clause.	No concession for carpark FRL's to be pursued given EV considerations and the requirement for a Special Hazard Report to ACT Fire & Rescue.	N/A
S5C20	**Type A fire-resisting construction – Class 2 and 3 buildings: Concession**	Applies to Class 2 with 4 storeys or less.	N/A
Section D: Access and Egress			
Part D2 - Provision for Escape			
D2D2 (D1.1)	**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 building.	-	Applicable
D2D3 (D1.2)	**Number of exits required** As the building has an effective height of more than 25 metres access to a minimum of two (2) exits is required from each storey.	-	Complies
	The retail tenancies have access to a single exit in lieu of two exits.	To be investigated as a performance solution by the fire engineer.	Performance Solution
D2D4 (D1.3)	**When fire-isolated stairways and ramps are required** Every stair in a Class 5 to 9 building must be fire isolated unless it does not connect or pass through more than 3 consecutive floors in a sprinkler protected building, or 2 storeys in a non-sprinkler protected building.	Stairs 1, 2, 3 and 4 are shown as fire isolated exits.	Compliance Readily Achievable
D2D5. (D1.4)	**Exit travel distances** *Class 2 parts* The entrance doorway of any sole-occupancy unit must be not more than 6m from an exit or from a point of choice between alternative exits. No point on the floor of a room which is not within a sole-occupancy must be 20m from an exit or for a point a choice between alternative exits. *Class 6 and 7a parts* No point on the floor must be more than 20 m to an exit or a point in which travel in different directions to 2 exits is available, in which case, the maximum distance to 1 exit cannot exceed 40 m	On residential levels 2 to 9, the distance to a point of choice is up to 12 metres in lieu of 6 metres. To be investigated as to whether a performance solution can be provided by the fire engineer.  Class 7a car park on ground floor is up	Performance Solution

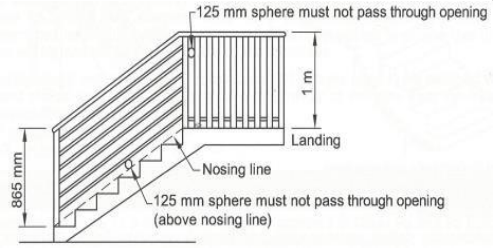
Clause	Description	Comment	Status
		to 25 metres to a point of choice in lieu of 20m and 42 metres to the nearest exit in lieu of 40m. To be investigated as to whether a performance solution can be provided by the fire engineer.  .	
D2D6 (D1.5)	**Distance between alternative exits** Class 2 parts have access to a single exit. <u>*Class 6 and 7a parts*</u> • ≤ 60 m travel distance between alternative exits and not less than 9 m between • Located so no alternative path of travel converges such that they become less than 6 m apart.	Class 7a car park on ground floor is up to 75 metres between alternative exits in lieu of 60m. To be investigated as to whether a performance solution can be provided by the fire engineer.	Performance Solution
D2D7 *(D1.6a)*	**Height of exits, paths of travel to exits and doorways** The unobstructed height throughout an exit must be not less than 2m.	-	Compliance Readily Achievable
D2D8 *(D1.6b, c, d & e)*	**Dimensions of exits and paths of travel to exits**	-	Compliance Readily Achievable
D2D9 *(D1.6f)*	**Width of doorways in exits or paths of travel to exits**	-	Compliance Readily Achievable
D2D10 *(D1.6g)*	**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.	-	Compliance Readily Achievable
D2D11 *(D1.6h & i)*	**Determination and measurement of exits and paths of travel to exits** The required width of a stairway or ramp in a required exit or path of travel to an exit must – (a) Be measured clear of obstructions such as handrails, projecting parts or barrier and the like. (b) Extend without interruption, except	-	Compliance Readily Achievable

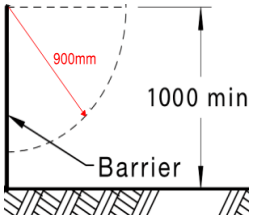
Clause	Description	Comment	Status
	for cornices to a height of not less than 2 m vertically above the floor surface.		
D2D12 (D1.7)	**Travel via fire-isolated exits** A doorway from a room must not open directly into a fire-isolated stairway or passageway unless it is from: • a public corridor, lobby or the like, • sole-occupancy unit occupying all of the storey, • a sanitary compartment, airlock or the like.	-	Compliance Readily Achievable
	Each fire isolated exit is to provide independent egress from each storey and discharge directly to a road or open space, or alternatively a covered area as permitted under this clause.	Stairs 2 and 4 discharge into covered areas not containing a height of 3m. To be investigated as to whether a performance solution can be provided by the fire engineer.  	Performance Solution
	Where the path of travel from the point of discharge of the fire-isolated stairways involves passing within 6m of the external wall of the same building the part of the wall must have: - • An FRL of 60/60/60; and • Any opening protected in accordance with C3.4.	Path of travel from Stair 2, 3 and 4 passes within 6m of the external walls and openings of the building. Details of protection to be provided for the construction certificate.	Additional Details Required

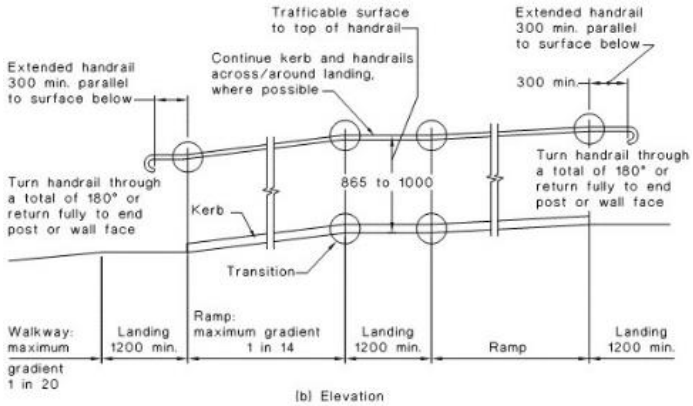
Clause	Description	Comment	Status
		 	
D2D13 (D1.8)	**External stairways or ramps in lieu of fire-isolated exits**		N/A
D2D14 (D1.9)	**Travel by non-fire-isolated stairways or ramps**		N/A
D2D15 (D1.10)	**Discharge from exits** An exit must not be blocked nor be capable of being blocked at its point of discharge.	-	Compliance Readily Achievable
	Required exits leading to open space are to have a path of travel to the road with an unobstructed width throughout of 1m.	-	Compliance Readily Achievable
	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 with an incline having a gradient not steeper than 1:8.	-	Compliance Readily Achievable
	The discharge point of alternative exits must be located as far apart as practical.	-	Compliance Readily Achievable
D2D16 (D1.11)	**Horizontal exits**		N/A
D2D17 (D1.12)	**Non-required stairways, ramps or escalators**		N/A
D2D18 (D1.13)	**Number of persons accommodated**	Determined in accordance with this clause.	Noted
D2D19 (D1.14)	**Measurement of distances**	-	Noted
D2D20	**Method of measurement**	-	Noted

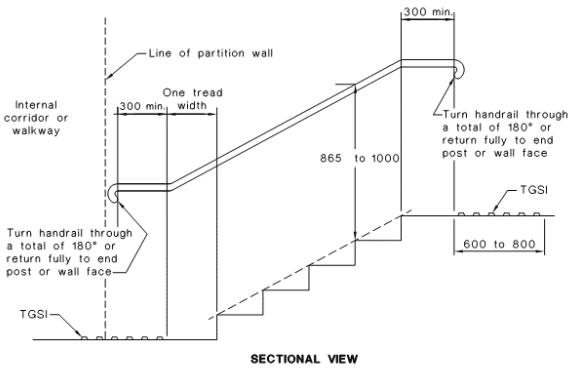
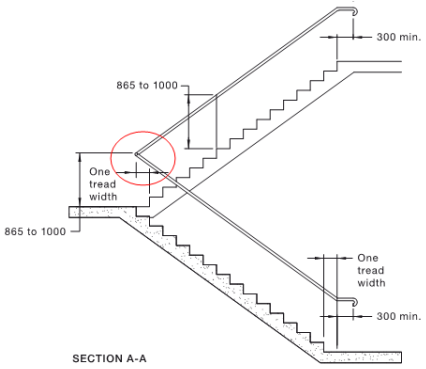
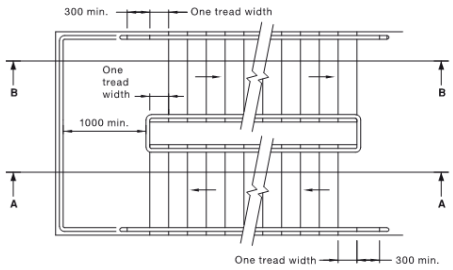
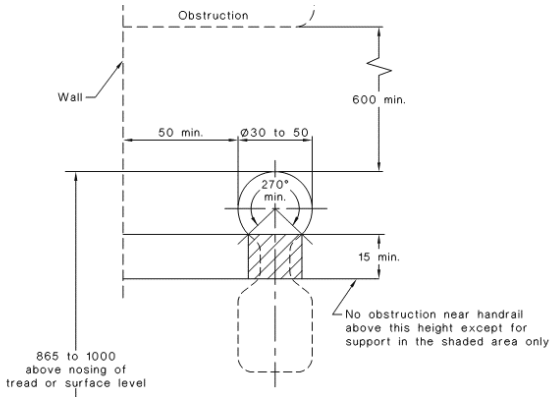
Clause	Description	Comment	Status
(D1.15)			
D2D21 (D1.16)	**Plant rooms, lift machine rooms and electricity network substations: Concession** A ladder may be used in lieu of a stairway as an exit from: a) a plant room with a floor area not more than 100m^2, or b) all but one point of egress from a plant room with a floor area not more than 200m^2.		Noted
D2D22 (D1.17)	**Access to lift pits** Access requirements apply to lift pits over 3 m in depth.	Lift consultant to confirm whether the requirements of this Clause apply.	Compliance Readily Achievable
D2D23 (D1.18)	**Egress from primary schools**		N/A
Part D3 – Construction of Exits			
D3D2 (D2.1)	**Application of Part**	-	Applicable
D3D3 (D2.2)	**Fire-isolated stairways and ramps** Fire resisting shafts must be constructed of non-combustible materials and so that if there is local failure it will not cause structural damage or impair the fire resistance of the shaft	-	Compliance Readily Achievable
D3D4 (D2.3)	**Non-fire-isolated stairways and ramps**	-	N/A
D3D5 (D2.4)	**Separation of rising and descending stair flights**	-	N/A
D3D6 (D2.5)	**Open access ramps and balconies**	-	N/A
D3D7 (D2.6)	**Smoke lobbies**	-	N/A
D3D8 (D2.7)	**Installations in exits and paths of travel** Electrical meters and motors, distribution boards and telecommunication boards must not be accessed from fire isolated exits and, if located in corridors leading to exits, should occur in non-combustible or fire protective smoke sealed enclosures. No openings to ducts conveying hot products of combustion permitted in required exits. Gas or fuel services not permitted in required exits. Electric or services equipment in paths of travel to exits must be within a non-	A note is to be added to the architectural plans for the Construction Certificate that nominates the following is to be provided for applicable enclosures (e.g. distribution boards) installed in a required exit, and any corridor, hallway, lobby or the like leading to a required exit: • Non-combustible linings to the internal walls, ceiling and doors. • Smoke seals to the doors that form part of the	Compliance Readily Achievable

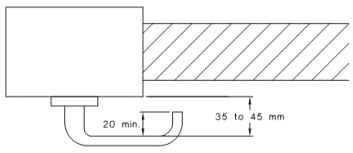
Clause	Description	Comment	Status
	combustible and smoke sealed enclosure.	enclosure.	
D3D9 (D2.8)	**Enclosure of space beneath stairs and ramps**	No enclosures under stairs shown.	N/A
D3D10 (D2.9)	**Width of required stairways and ramps**	-	Noted
D3D11 (D2.10)	**Pedestrian ramps**		N/A
D3D12 (D2.11)	**Fire-isolated passageways** Fire isolated passageways are to have an FRL equivalent to the fire resisting stair shaft as specified in Specification 5 when tested from the outside	-	Compliance Readily Achievable
D3D13 (D2.12)	**Roof as open space** The roof is required to have an FRL of not less than 120/120/120 and not incorporate any roof lights or other openings within 3 m of the path of travel.	-	Compliance Readily Achievable
D3D14 (D2.13)	**Going and risers** To provide safe passage, stairways must comply with the following: • minimum 2 risers / maximum 18 in each flight • risers 115mm min 190 mm max - going 250mm min 355mm max - 2R+G 550mm min 700mm max. • Adjacent risers, or between adjacent goings a variation no greater than 5mm is permitted and the largest and smallest riser within the flight or the largest and smallest going within a flight is not to exceed a variation of 10mm. • Under the requirements of AS1428.1-2009 open riser are not permitted. • All treads to be fitted with non-slip finish or non-skid strips. • Treads are required to have a surface or nosing strip with a slip-resistance classification not less than listed in Table D3D15 when tested in accordance with AS 4586  	Stair sections are to be provided for review for the Construction Certificate.	Additional Details Required

Clause	Description	Comment	Status
D3D15 (D2.14)	**Landings** Ramps Surfaces, stair tread surfaces or nosing strips, and stair landing surfaces, or landing nosing strips to a flight below, must achieve slip-resistance classifications to AS4586-2013 as follows: **Application** / **Dry Surface Conditions** / **Wet Surface Condition** 1:14 or steeper ramps — P4 or R11 — P5 or R12 Ramps of 1:14 to 1:20 — P3 or R10 — P4 or R11 Tread or Landing Surface — P3 or R10 — P4 or R10 Nosing Strip or Landing Strip — P3 — P4	Stair sections are to be provided for review for the Construction Certificate.	Additional Details Required
D3D16 (D2.15)	**Thresholds** Steps should not occur at doorways without a threshold landing except as follows: • In a building required to be accessible and the doorway opens to a road or open space and is provided with a threshold ramp or step ramp in accordance with AS1428.1, • Or in any other case a single 190mm step is permitted at doors leading to the exterior.	-	Compliance Readily Achievable
D3D17 *(D2.16a, b & c)*	**Barriers to prevent falls** Requirements apply to the provision and design of barriers at locations where a person could fall 1m or more. Generally, 125mm maximum gap size limits apply between balusters or rails and a 1m minimum height applies, with alternate dimensions permitted in fire isolated stairs and industrial areas.  Where the level of the surface below is 4m or more, a balustrade or other barrier must not facilitate climbing of horizontal elements between 150mm and 760mm above the floor. Climbable elements cannot be located within	The architectural plans are to include balustrade details for review for the Construction Certificate. **Note 1:** Where the level of the surface below is 4m or more, a balustrade or other barrier must not facilitate climbing of horizontal elements between 150mm and 760mm above the floor. **Note 2:** If air conditioning condensing units are proposed on the balconies, they are to be positioned so that they do not act as a climbable element in accordance with AS 1926.1-2012.	Additional Details Required

Clause	Description	Comment	Status
	900mm of the top rail of each balustrade where the fall is greater than 4m. This measurement is taken in an arc as seen in the extract below  		
D3D18 *(Table D2.16a)*	**Height of barriers** The height of barrier required by D3D7 must be no less than the following: (a) For stairways with a gradient of 1:20 or steeper – 865 mm (b) For landings to a stair or ramp where the barrier is provided along the inside edge of the landing and does not exceed 500 mm – 865 mm (c) In front of fixed seating on a mezzanine or balcony within an auditorium in a class 9b building – 700 mm (d) All other locations – 1 m	-	Noted
D3D19 *(Table D2.16a)*	**Openings in barriers** Expect where a concession is granted for fire-isolated stairways and ramps, openings in a required barrier must not allow a 125 mm barrier to pass through.	-	Noted
D3D20 *(Table D2.16a)*	**Barrier climbability** A barrier required by D3D17, located on a floor more than 4m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150 mm and 760 mm above the floor.	-	Noted
D3D21 *(D2.16d)*	**Wire barriers** Where a required barrier is constructed of wire, it must be installed in accordance with the tension values in table D3D12a.	-	Noted
D3D22 (D2.17)	**Handrails** Handrails to exits including parts of fire isolated exit serving an area required to be accessible to people with disabilities must comply with Clause 12 of AS1428.1, viz: • Handrails not to obstruct circulation space • 30-50mm diameter	Handrail details to be confirmed by the access consultant. Handrails are to be provided in compliance with Clause D3.3 and include the following- **Non-Fire Isolated Stairways and Ramps** All stairs and ramps not used as an	Additional Details Required

Clause	Description	Comment	Status
	• 865-1000mm above nosing line of stairs • 865-1000mm above ramps and landings • Consistent height throughout • 50mm grip clearance and no obstructions to handhold • Continuous at internal (return) landings • Provided with handrail extensions and 180 degree curled ends	emergency exit are to have handrails installed on both sides that comply with Clause 10 & 11 of AS1428.1-2009 **Fire Isolated Stairways and Ramps** In Fire Isolated Stairways & Ramps a handrail is required to be installed to at least one side of stair flights and located not less than 865mm above the nosing's of stair treads and the floor surfaces of landings **Consistent Handrail Heights for all stairways** The height of the top of the handrail, measured at a height of between 865mm – 1000mm vertically from the stair nosing shall be consistent throughout the ramp (or stairs) and any landings. All stairs including fire stairs are required to be designed to comply with Clause 12 of AS1428.1 – 2009	
	Ramps  (b) Elevation DIMENSIONS IN MILLIMETRES FIGURE 14 RAMP HANDRAILS **Stairways**		

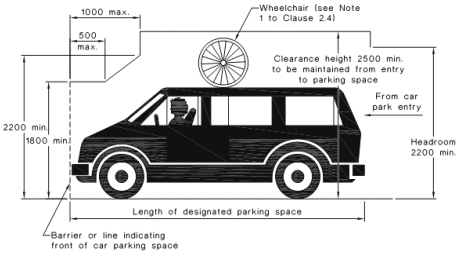
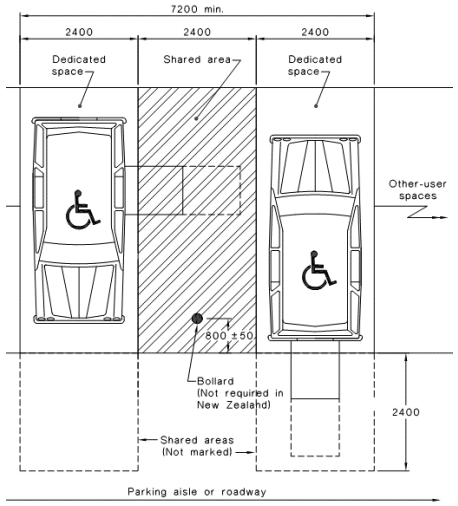
Clause	Description	Comment	Status
	 SECTIONAL VIEW DIMENSIONS IN MILLIMETRES FIGURE 26(B) STAIRWAY LOCATION AND HANDRAIL EXTENSIONS AT END OF STAIRWAY OTHER THAN AT LINE OF BOUNDARY  SECTION A-A  (a) Plan DIMENSIONS IN MILLIMETRES **Handrail Profile** 		
D3D23 (D2.18)	**Fixed platforms, walkways, stairways and ladders**	-	Compliance Readily

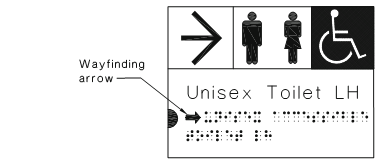
Clause	Description	Comment	Status
	Platforms, walkways, stairs, ladders and the like that give access to and around plant and equipment, machine rooms, attic spaces and other low use areas of the building are permitted provided that construction details are to AS1657.		Achievable
D3D24 (D2.19)	**Doorways and doors** Exit doors must not be revolving door, roller shutter or tilt door. Can be fitted with a sliding door if it leads directly to open space and can be opened manually under a force of not more than 110N and be fitted with a fail-safe device if the door is power operated.	Any proposed auto sliding doors at the entries into the building must comply with these requirements.	Compliance Readily Achievable
D3D25 (D2.20)	**Swinging doors** Defined exit doors that serve a part of a building with a floor area over 200m^2 must swing outward in the direction of exit travel. Must not encroach more than 500mm into the required width of the stair or 100mm when fully open and swing in the direction of travel.	-	Compliance Readily Achievable
D3D26 (D2.21)	**Operation of latch** Exit doors should be provided with "free handle" egress via a downward or pushing action and, if serving an area accessible to people with disabilities, must have non-slip "D" pull handles with 35-45mm hand clearances.  (a) Isometric view  (b) Plan view Where the latch operation device is not located on the door leaf itself- • manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located not less than 500 mm from an internal corner; and • for a hinged door, between 1 m and 2 m from the door leaf in any position; • and for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position.	All exit doors and doors in the path of travel must comply. A door schedule nominating the proposed door hardware is to be provided for review. As part of the Construction Certificate.	Compliance Readily Achievable

Clause	Description	Comment	Status
	• braille and tactile signage complying with Clause 3 and 6 of Specification D3.6 must identify the latch operation device.		
D3D27 (D2.22)	**Re-Entry from Fire-Isolated Exits** Fire isolated stair doors must facilitate re-entry from within the stair back onto the floor on every 4th level at all times and on all levels in the event of a fire alarm, where serving a health care or aged care building or where the exit stair serves a storey above 25m in effective height. Doors of fire-isolated exits must not be locked from the inside of a fire-isolated exit, unless: <u>Option 1</u> • All doors are fitted with a fail-safe device that automatically unlocks the door upon activation of a fire alarm; **AND** • On at least every fourth storey, the doors are not able to be locked at all and are sign posted stating re-entry is available at that level. <u>Option 2</u> • All doors are fitted with a fail-safe device that automatically unlocks the door upon activation of a fire alarm; **AND** • An intercommunication or audible/visual alarm system is provided within the stair to assist persons who may accidentally be locked within the stair.	Details of compliance to be provided for the construction certificate.	Additional Details Required
D3D28 (D2.23)	**Signs on doors** • Signage in capital letters not less than 20mm high to be provided on doors as follows i. An automatic door held open by an automatic hold-open device: **FIRE SAFETY DOOR - DO NOT OBSTRUCT** ii. for a self-closing door **FIRE SAFETY DOOR** **DO NOT OBSTRUCT** **DO NOT KEEP OPEN** iii. for a door discharging from a fire-isolated exit **FIRE SAFETY DOOR - DO NOT OBSTRUCT**	A signage schedule is to be provided for review prior to SWP undertaking the final inspection. Under Section 108 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 a notice is to be displayed in a conspicuous location adjacent to a doorway providing access to but not within a fire isolated stairway, passageway or ramp. The words "**OFFENCES RELATING TO FIRE EXITS**" are to be provided in letters at least 8mm high and the remaining words are to be at least 2.5mm high. The notice is to state the following:	Compliance Readily Achievable

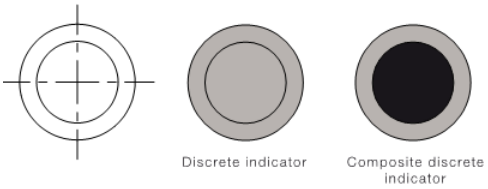
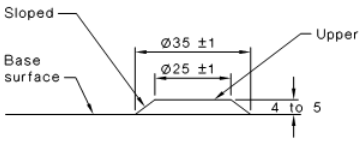
Clause	Description	Comment	Status
		OFFENCES RELATING TO FIRE EXITS It is an offence under the Environmental Planning and Assessment Act 1979 (a) to place anything in or near this fire exit that may obstruct persons moving to or from this exit, or (b) to interfere with or obstruct the operation of any fire doors, or (c) to remove, damage or otherwise interfere with this notice.	
D3D29 (D2.24)	**Protection of openable windows** Windows serving a residential bedroom or serving an early childhood centre must be protected where the floor is 2m or more above the external surface below. Window openings must be provided with protection if the floor below the window is 2m or more above the surface beneath in the bedrooms of Class 2 or 3 buildings or Class 9b early childhood centre. Where the window sill is below 1.7m above the floor level, the openable portion of the window must be protected with • a device to restrict the window opening or • a screen with secure fittings A device or screen required must: • not permit a 125mm sphere to pass through the window opening or screen; and • resist an outward horizontal action of 250N against the window restrained by a device or screen protecting the opening and have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden. Where the fall distance from the floor to the surface below is 4m or more or where a release device occurs to a required screen, an additional barrier at 865mm above floor level is required and must be non-climbable with gaps no greater than 125mm between elements.	The proposed mechanisms for restricting window openings in the following locations are to be detailed as part of the window schedule: • bedroom windows in Class 2 SOUs where the floor below the window is 2 m or more above the surface beneath and the lowest level of window opening is less than 1.7 m above FFL • openable windows greater than 4 m above the surface beneath (**n.b.** window sills require to be a minimum height of 865 mm above the FFL). Refer to Appendix D3D29 for additional information.	Additional Details Required
D3D30 (D2.25)	**Timber stairways: Concession**		N/A
Part D4 – Access for People with Disabilities			
D4D2 (D3.1)	**General building access requirements** Access is generally required for persons with a	An accessibility report prepared by an accredited access consultant is to be	Additional Details

Clause	Description	Comment	Status
	disability throughout all areas unless specifically exempted.	provided that verifies the design complies with the following: • BCA 2022 Vol 1 – Part D4 • AS 1428.1—2009 • AS/NZS 2890.6—2009.	Required
D4D3 (D3.2)	**Access to buildings** External access to the building for people with a disability must be provided: • From main pedestrian entry points at the allotment boundary. • Through the principle pedestrian entrance. • Through at least 50% of all pedestrian entries. • From accessible car parking spaces. • For buildings over 500m², so that an accessible entry occurs within 50m of any non-accessible entry.	An accessibility report prepared by an accredited access consultant is to be provided that verifies the design complies with the following: • BCA 2022 Vol 1 – Part D4 • AS 1428.1—2009 • AS/NZS 2890.6—2009.	Additional Details Required
D4D4 (D3.3)	**Parts of the building to be accessible** All parts of the building must be accessible to people with a disability except for areas where access would be inappropriate due to the particular use or areas that would pose a health or safety risk to people with a disability. Every ramp, except a fire isolated ramp, must comply with Clause 10 if AS 1428.1. Every stairway, except a fire isolated stairway, must comply with Clause 11 of AS 1428.1. A fire isolated stairway must comply with Clause 11(f) and (g) of AS 1428.1. Every passenger lift must comply with Part E3 Access ways must have passing spaces and turning spaces complying with AS 1428.1. Pile height or pile thickness of carpets shall comply with the requirements of this Clause and AS 1428.1.	An accessibility report prepared by an accredited access consultant is to be provided that verifies the design complies with the following: • BCA 2022 Vol 1 – Part D4 • AS 1428.1—2009 • AS/NZS 2890.6—2009.	Additional Details Required
D4D5 (D3.4)	**Exemptions** Certain areas may not need to be accessible if the area is deemed inappropriate because of the particular use or the area would pose a health or safety risk for people with disabilities.	An accessibility report prepared by an accredited access consultant is to be provided that nominates what areas can be exempted.	Noted
D4D6 (D3.5)	**Accessible carparking** The accessible parking spaces must comply with AS/NZS 2890.6 – 2009. General requirements are: • 2.4m x 5.4m. • 2.2m head clearance for access and egress	An accessibility report prepared by an accredited access consultant is to be provided that verifies the design complies with the following: • BCA 2022 Vol 1 – Part D4 • AS 1428.1—2009 • AS/NZS 2890.6—2009.	Compliance Readily Achievable

Clause	Description	Comment	Status
	routes to and from accessible car spaces. • 2.5m head clearances over accessible car spaces. • Flat even surfaces. • Designated and sign posted for disabled users.  	A Class 2 building is not required to be provided with accessible carparking; however, accessible carparking may be required as part of the development approval. If so, accessible carparks are to comply with AS/NZS 2890.6-2009.	Noted
D4D7 (D3.6)	**Signage** Braille and tactile signage complying with Specification 15 and incorporating the international symbol of access or deafness in accordance with AS1428.1 must identify every accessible sanitary facility and space with a hearing augmentation system. Every doorway required to be provided with an exit sign under Clause E4D5 is to be provided with braille and tactile signage that states "**EXIT**" and identify the floor level "**LEVEL #**".  Signage must be provided within a room containing hearing augmentation identifying the type of hearing augmentation, the area covered in the room and if receivers are being	Applicable signage must be provided in accordance with the following: • BCA 2022 Vol 1. Clause D4D7 and Specification 15. • AS 1428.1—2009. A signage schedule is to be provided for review prior to SWP undertaking the final inspection.	Compliance Readily Achievable

Clause	Description	Comment	Status
	used and where the receivers can be obtained. Signage identifying ambulant accessible sanitary facilities in accordance with AS 1428.1 must be located on the door of the facility.    Where the pedestrian entrance is not accessible, directional signage in accordance with AS 1428.1 must be provided to direct a person to the location of the nearest accessible pedestrian entrance. Where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility.		
D4D8 (D3.7)	**Hearing augmentation**		N/A

D4D9
(D3.8)
	Tactile indicators (TGSIs)
	Tactile indicators are to be provided to all stairways, ramps and escalators must be provided to warn people who are blind or have a vision impairment that they are approaching:
	• a stairway, other than a fire-isolated stairway,
	• a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp, or
	• in the absence of a suitable barrier an overhead:
	  ○ obstruction less than 2 m above floor level, other than a doorway
	  ○ an access way meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area
		An accessibility report prepared by an accredited access consultant is to be provided that verifies the design complies with the following:
		• BCA 2022 Vol 1 – Part D4.
		• AS 1428.1—2009.
			Additional Details Required

Clause	Description	Comment	Status
	referred to in D3.4, if there is no kerb or kerb ramp at that point Tactile ground surface indicators must comply with sections 1 and 2 of AS/NZS 1428.4.1  (a) Plans of individual truncated cones  (b) Elevation of individual truncated cone		
D4D10 (D3.9)	**Wheelchair seating spaces in Class 9b assembly buildings**		N/A
D4D11 (D3.10)	**Swimming pools**		N/A
D4D12 (D3.11)	**Ramps** On an access way a series of connected ramps must not have a combined vertical rise of more than 3.6m. A landing for a step ramp must not overlap a landing of another step ramp or ramp.	An accessibility report prepared by an accredited access consultant is to be provided that verifies the design complies with the following: • BCA 2022 Vol 1 – Part D4. • AS 1428.1—2009.	Compliance Readily Achievable
D4D13 (D3.12)	**Glazing on an accessway** On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.		Compliance Readily Achievable
Section E: Services and Equipment			
Part E1 – Fire Fighting Equipment			
E1D2 (E1.3)	**Fire hydrants** The building requires a fire hydrant system in accordance with AS 2419.1 – 2021, including - 1. The protection requirements of clause 3.5.5.2 (radiant heat barrier) do not apply to external fire hydrants located not more than 10 m from the building, provided the building is sprinkler protected throughout by a sprinkler system or a combination of sprinkler system conforming to AS 2118.1, AS	Hydraulic plans and an associated design certificate prepared by a hydraulic engineer are to be provided for review. Please note that the design certificate is required to state that the design complies with the following: • BCA 2022 Vol 1 Clause E1D2 • AS 2419.1—2021 • AS 2118.6—2012 (if	Additional Details Required

Clause	Description	Comment	Status
	2118.4, AS 2118.6, FPAA101D or FPAA101H.	applicable). **Note 1:** NCC 2022 has adopted the following Australian Standard revisions: • AS 2419.1-2021 – Fire hydrant system **Note 1:** All parts of the floor shall not be more than **40 m** from an internal fire hydrant, if the travel distances throughout the building are in compliance with the DTS provisions of the NCC, coverage may be extended to **45 m.** **Note 3:** Since the building has an effective height of greater than 25 m, the fire hydrant system is required to be installed in a ring main configuration.	
	A fire brigade booster assembly shall be located within or affixed to the façade of the building containing the principal entrance and not more than 20 m from the principal pedestrian entrance or within or fixed to the facade of the building containing the principle protests pedestrian entrance and identified with the visual alarm device.	The fire brigade booster assembly is not located within or affixed to the façade of the building containing the principal entrance. To be investigated as to whether a performance solution can be provided by the fire engineer.	Performance Solution
E1D3 (E1.4)	**Fire hose reels** Fire hose reel coverage to AS 2441—2005 is required to the Class 7a carpark and Class 6 retail area. Hose reels are not required to serve the Class 2 residential areas.	Hydraulic plans and an associated design certificate prepared by a hydraulic engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E1D3. • AS 2441—2005.	Additional Details Required
E1D4 (E1.5)	**Sprinklers** A sprinkler system must – (a) Be installed in a building or part of a building when required by E1D5 to E1D12 are applicable; and (b) Comply with specification 17 and Specification 18 as applicable.		Noted
E1D5 (E1.5)	**Where sprinklers are required: all classifications** Fire Sprinklers are required throughout all buildings if any part of the building exceeds an	Fire services plans and an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following:	Additional Details Required

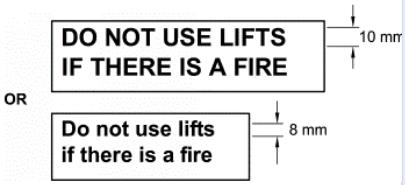
Clause	Description	Comment	Status
	effective height of 25 m.	• BCA 2022 Vol 1 Clause E1D5, Specification 17. • AS 2118.1—2017. • AS 2118.6—2012 (if applicable). **Note 1:** Euro-style laundries are to be provided with sprinkler coverage, noting that ACTF&R do not consider these areas as cupboards and the concession provided by Clause 5.9.17 of AS 2118.1—2017 cannot be applied.	
E1D6 (E1.5)	**Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings**		N/A
E1D7 (E1.5)	**Where sprinklers are required: Class 3 building used as a residential care building.**		N/A
E1D8 (E1.5)	**Where sprinklers are required: Class 6 building** In a class 6 building, sprinklers are required in fire compartments where either of the following apply – (a) A floor area of more than 3,500 m2 (b) A volume of more than 21,000 m3	Fire compartment less than 3,500m^2	N/A
E1D9 (E1.5)	**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.	Fire services plans and an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E1D9, Specification 17. • AS 2118.1—2017. • AS 2118.6—2012 (if applicable).	Additional Details Required
E1D10 (E1.5)	**Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings**	-	N/A
E1D11 (E1.5)	**Where sprinklers are required: Class 9b buildings**	-	N/A
E1D12 (E1.5)	**Where sprinklers are required: additional requirements**	-	N/A
E1D13 (E1.5)	**Where sprinklers are required: occupancies of excessive hazard**	-	N/A
Spec 17 (Spec E1.5)	**Fire sprinkler systems**	The requirements of specification 17 to be confirmed. In particular the following design aspects to be confirmed:	Additional Details Required

Clause	Description	Comment	Status
		• The location of sprinkler alarm valves which are required to have direct egress to a road or open space. • Water supply requirements for the sprinkler system serving a building greater than 25 metres in effective height.	
Spec 18 (Spec E1.5a)	**Class 2 and 3 buildings not more than 25 m in effective height**		N/A
E1D14 (E1.6)	**Portable fire extinguishers** Portable fire extinguishers are to be provided in accordance with clause E1D14 and AS 2444—2001 in the following locations: • Emergency services switchboards. • Class 2, 3 or 4 residential areas are to be protected by 2.5 kg ABE type fire extinguishers located in common areas on the storey served and located not more than 10 m from each sole occupancy unit entry door.	Fire services plans an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E1D14. • AS 2444—2001.	Additional Details Required
E1D15 (E1.8)	**Fire control centre** A fire control centre for Fire Indicator, Fire Fans Control and Emergency Intercom panels is required for buildings of over 25m in effective height at a location readily available for firefighting operations and located. Fire control centre is required to comply with clauses S19C3 to C19C6 of Specification 19.	Fire services plans and an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with – BCA 2022 Vol 1 Clause E1D5 and Specification 19.	Additional Details Required
E1D16 (E1.9)	**Fire precautions during construction** In a building under 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. Fire services are required during construction, including fire hydrants and hose reels which must be active and operational after the building reaches a construction stage effective height of 12m. When the building reaches 12m effective height: • All required hydrants and hose reels must be operational on every storey covered by a roof or floor slab over, except for the two uppermost storeys. • Any required booster connections must be	Builder to ensure compliance is met during construction.	Compliance Readily Achievable

Clause	Description	Comment	Status
	installed.		
E1D17 (E1.10)	**Provisions for special hazards** ACT Fire & Rescue have introduced Fire Safety Guideline (FSG-22) dealing with Electric Vehicles (EV) and EV Charging Equipment within the Built Environment. Any building/project containing a carpark (Class 7a building or part of a building), the completion of a Risk Assessment in the form of a 'Special Hazard Report' to be submitted to ACTF&R as part of the Building Approval process. The Special Hazard Report is to identify the risks associated with the presence or potential presence of EV's and/or EV Charging facilities within the subject building, and determine the required safety measures to mitigate these risks so far as is reasonably practicable (SFAIRP). As such the Special Hazard Report is to be prepared by person/s qualified or with experience in Fire Safety, Risk Assessment and Electric Vehicles. The Risk Assessment is required to generally follow the principles and framework of ISO 31000 – Risk Management Guidelines. The Special Hazard Report may be provided as a separate report, as part of the PBDB or PBDR. However, support for Performance Solutions provided within the PBDB may be rescinded on review of a subsequently provided Special Hazard Report. As a relevant stakeholder ACTF&R will engage in the consultation process to assist in determining the level of risk and mitigation strategies applied, to establish what is considered reasonably practicable (SFAIRP).	The projects Fire Safety Engineer is to develop a Special Hazard Risk Assessment Report to be submitted to ACTF&R for their approval. Evidence of ACTF&R acceptance of the report is to be provided to SWP.	Additional Details Required
Part E2 – Smoke Hazard Management			
E2D2 (E2.1)	**Application of Part**		Applicable
E2D3 (E2.2)	**General requirements** Air handling plant not forming part of a smoke hazard management system must be installed to operate as a zoned smoke control system under AS1668.1, or should shut down in fire mode and be fitted with dampers to prevent smoke spread if the air handling system 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. Note: Each sole-occupancy unit in the Class 2 portion is treated as a separate fire	Details of the mechanical handling system will be required for review to determine compliance. Ground floor mechanical design to be provided for review.	Additional Details Required

Clause	Description	Comment	Status
	compartment for the purposes of this clause.		
E2D4	**Fire Isolated Exits** 2. A part of a building listed in (2) must be provided with – b) An automatic air pressurisation system in accordance with AS 1668.1 c) Open access ramps or balconies in accordance with D3D6. 3. The requirements of (1) apply to a required fire-isolated stairway – a) Serving a storey above an effective height of 25 m; b) More than 2 storeys below ground. c) An atrium.	All fire stairs are required to be provided with a stair pressurisation system in accordance with AS 1668.1 Mechanical services plans and an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E2D4, Specification 20. • AS 1668.1—2015.	Additional Details Required
E2D5 (E2.2a)	**Buildings more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building** The Class 2 portion requires an automatic smoke detection and alarm system complying with Specification 2 to be provided.	Fire services plans and an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E2D5, Specification 20. • AS 1670.1—2018	Additional Details Required
E2D6 (E2.2a)	**Buildings more than 25m in effective height: Class 5, 6, 7b, 8 or 9b buildings** A class 5, 6, 7b, 8 or 9b building or part of a building must be provided with zone pressurisation system between vertically separated fire compartments in accordance with AS 1668.1, if the building exceeds 25 m in effective height.	Zone smoke control is proposed to be omitted from Class 6 tenancies on ground floor. To be addressed as a performance solution by the fire safety engineer.	Performance Solution
E2D7 (E2.2a)	**Buildings more than 25m in effective height: Class 9a buildings**	-	N/A
E2D8 (E2.2a)	**Buildings not more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building**	-	N/A
E2D9 (E2.2a)	**Buildings not more than 25m in effective height: Class 5, 6, 7b, 8 or 9b buildings**	-	N/A
E2D10 (E2.2a)	**Buildings not more than 25m in effective height: large isolated buildings subject to C3D4**	-	N/A
E2D11 (E2.2a)	**Buildings not more than 25m in effective height: Class 9a and 9c buildings.**	-	N/A
E2D12 (E2.2a)	**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	Fire services plans and mechanical service plans an associated design certificate prepared by a fire services engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause E2D12 • AS 1668.1—2015. • AS 1670.1—2018	Additional Details Required

Clause	Description	Comment	Status
E2D13 *(E2.2a)*	**Basements (other than Class 7a buildings)**	-	N/A
E2D14 *(E2.2b)*	**Class 6 buildings – in fire compartments more than 2000 m2: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)**	-	N/A
E2D15 *(E2.2b)*	**Class 6 buildings – in fire compartments more than 2000 m2: Class 6 building (containing an enclosed common walkway or mall)**	-	N/A
E2D16 *(E2.2b)*	**Class 9b – assembly buildings: nightclubs, discotheques and the like**	-	N/A
E2D17 *(E2.2b)*	**Class 9b – assembly buildings: exhibition halls**	-	N/A
E2D18 *(E2.2b)*	**Class 9b – assembly buildings: theatres and public halls**	-	N/A
E2D19 *(E2.2b)*	**Class 9b – assembly buildings: theatres and public halls (not listed in E2D18) including lecture theatres and cinema/auditorium complexes**	-	N/A
E2D20 *(E2.2b)*	**Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)**	-	N/A
E2D21 (E2.3)	**Provisions of special hazards** ACT Fire & Rescue have introduced Fire Safety Guideline (FSG-22) dealing with Electric Vehicles (EV) and EV Charging Equipment within the Built Environment. Any building/project containing a carpark (Class 7a building or part of a building), the completion of a Risk Assessment in the form of a 'Special Hazard Report' to be submitted to ACTF&R as part of the Building Approval process. The Special Hazard Report is to identify the risks associated with the presence or potential presence of EV's and/or EV Charging facilities within the subject building, and determine the required safety measures to mitigate these risks so far as is reasonably practicable (SFAIRP). As such the Special Hazard Report is to be prepared by person/s qualified or with experience in Fire Safety, Risk Assessment and Electric Vehicles. The Risk Assessment is required to generally follow the principles and framework of ISO 31000 – Risk Management Guidelines. The Special Hazard Report may be provided as a separate report, as part of the PBDB or PBDR. However, support for Performance Solutions provided	The projects Fire Safety Engineer is to develop a Special Hazard Risk Assessment Report to be submitted to ACTF&R for their approval. Evidence of ACTF&R acceptance of the report is to be provided to SWP.	Additional Details Required

Clause	Description	Comment	Status
	within the PBDB may be rescinded on review of a subsequently provided Special Hazard Report. As a relevant stakeholder ACTF&R will engage in the consultation process to assist in determining the level of risk and mitigation strategies applied, to establish what is considered reasonably practicable (SFAIRP).		
Part E3 – Lift Installations			
E3D2 (E3.1)	**Lift installations** Electric and electrohydraulic lifts must comply with the design requirements of BCA Specification 24.	A design certificate prepared by the lift manufacturer is to be provided for review that verifies compliance with – • BCA 2022 Vol 1 Part E3 and Specification 24.	Compliance Readily Achievable
E3D3 (E3.2)	**Stretcher facility in lifts** Buildings greater than 12m in effective height require a lift sized to accommodate a stretcher of 2m x 0.6m x 1.4m high. The lift must serve every level to which lift access is provided.	Since the passenger lifts serve a storey with an effective height greater than 12 m, the lifts will need to be able to accommodate a space for a stretcher that is not less than 600 mm wide x 2000 mm long x 1400 mm high above the floor level.	Additional Details Required
E3D4 (E3.3)	**Warning against use of lift in fire** Warning signage is required at lift doors advising that lifts should not be used in the event of a fire.	Signage to be installed stating. 	Compliance Readily Achievable
E3D5 (E3.4)	**Emergency lifts** Emergency lifts of prescribed size, operation and fire isolation are required in buildings where: • the building has an effective height over 25m. Where more than two passenger lifts serve a storey, two emergency lifts must be provided, and these must be in separate shafts if multiple lift shafts occur. The following requirements apply to an emergency lift: • Must serve all storeys served by a passenger lift. • Must be contained in a fire rated shaft.	Emergency lifts are required within the building. A design certificate prepared by the lift manufacturer is to be provided for review that verifies compliance with – • BCA 2022 Vol 1 Part E3 and Specification 24.	Additional Details Required
E3D6 (E3.5)	**Landings**	-	Compliance Readily Achievable
E3D7 (E3.6)	**Passenger lifts** Every passenger lift must be one of the types identified clause E3D7, have accessible features in accordance with clause E3D8 and	Lift floor dimensions of not less than 1400 mm wide x 1600 mm deep are required. A design certificate prepared by the lift manufacturer is	Compliance Readily Achievable

Clause	Description	Comment	Status
	not reply on a constant pressure device for its operation if the lift car is fully enclosed.	to be provided for review that verifies compliance with the following: • BCA 2022 Vol 1 Part E3 and Specification 24. • AS 1735.12—1999.	
E3D8 (E3.6)	**Accessible features required for passenger lifts** In an accessible building, every passenger lift must have the following features where applicable: b) A handrail complying with the provisions for a mandatory handrail in AS 1735.12 c) Lift floor dimensions of not less than 1400 mm wide x 1600mm deep for all lifts which travel more than 12 m. d) Lift floor dimensions of not less than 1100 mm wide x 1400 mm deep for all lifts which travel not more than 12 m e) Minimum clear door opening width complying with AS 1735.12	A design certificate prepared by the lift manufacturer is to be provided for review that verifies compliance with the following: • BCA 2022 Vol 1 Part E3 and Specification 24. • AS 1735.12—1999.	Compliance Readily Achievable
E3D9 (E3.7)	**Fire service control** Where lifts serve a storey above 12m in effective height: • A fire service control switch is required for each lift or lift group. • A lift car fire service drive control is required for each lift.	A design certificate prepared by the lift manufacturer is to be provided for review that verifies compliance with the following: • BCA 2022 Vol 1 Part E3 and Specification 24.	Compliance Readily Achievable
E3D10 (E3.8)	**Residential care buildings**	-	Compliance Readily Achievable
E3D11 (E3.9)	**Fire service recall control switch** The fire service control switch must be located at the landing nominated by the appropriate authority and, when activated, must return all lifts to the nominated floor. If a lift car drive control has been activated, it shall override the landing fire service control switch.	A design certificate prepared by the lift manufacturer is to be provided for review that verifies compliance with the following: • BCA 2022 Vol 1 Part E3 and Specification 24.	Compliance Readily Achievable
E3D12 (E3.10)	**Lift car fire service drive control switch** The lift car service drive control must be activated from within the lift car. The switch is to be located between 600mm and 1500mm above the lift car floor and be labelled '**FIRE SERVICE**" in indelible white lettering on red background. The "**OFF**" and "**ON**" positions are to be identified.	A design certificate prepared by the lift manufacturer is to be provided for review that verifies compliance with the following: • BCA 2022 Vol 1 Part E3 and Specification 24.	Compliance Readily Achievable

Clause	Description	Comment	Status
Part E4 – Emergency Lighting, Exit and Warning Systems			
E4D2 (E4.2)	**Emergency lighting requirements** Emergency lighting is to be provided throughout the building in the following locations: • Every fire-isolated stairway, fire-isolated ramp or fire-isolated passageway. • Every passageway, hallway, corridor or the like, that is part of the path of travel to an exit. • In every room having a floor area more than 100 m^2 that does not open to a corridor or space that has emergency lighting or to a road or open space. • In any room having a floor area more than 300m^2. • In every required non-fire isolated stairway. • To every room or space that has public access in a Class 6 building if— ○ the floor area is more than 300 m^2 ○ any point on the floor is more than 20 m from the nearest doorway opening directly to the road or open space; or ○ the egress involves a vertical rise within the building of more than 1.5 m.	Electrical plans and an associated design certificate prepared by an electrical engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clauses E4D2 and E4D4. • AS/NZS 2293.1—2018.	Additional Details Required
E4D3 (E4.3)	**Measurement of distances**		Noted
E4D4 (E4.4)	**Design and operation of emergency lighting** Emergency lighting must comply with to AS/NZS 2293.1—2018.		Compliance Readily Achievable
E4D5 (E4.5)	**Exit signs** • Exit signage must comply with AS/NZS 2293.1—2018. • Exit signs must be clearly visible to person approaching the exit and must be installed on, above or adjacent to the following: ○ A door providing direct egress from a storey to a stairway, passageway or ramp serving as a required exit. ○ A door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space.	Electrical plans and an associated design certificate prepared by an electrical engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clauses E4D5, E4D6 and E4D8. • AS/NZS 2293.1—2018.	Additional Details Required

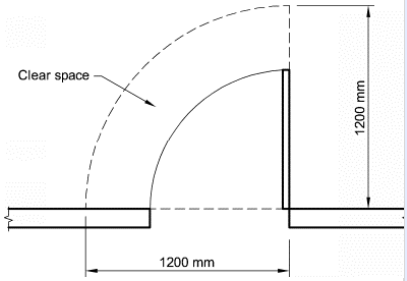
Clause	Description	Comment	Status
	○ A horizontal exit. ○ A door serving as or forming part of a required exit in a storey required to be provided with emergency lighting.		
E4D6 (E4.6)	**Direction signs** Where an exit is not readily apparent then exit signs with directional arrows must be installed in appropriate positions in corridors, hallways, lobbies and the like indicating the direction to a required exit		Compliance Readily Achievable
E4D7 (E4.7)	**Class 2 and 3 buildings and Class 4 parts: Exemptions**		Noted
E4D8 (E4.8)	**Design and operation of exit signs** 1. Exit signs are to operate in accordance with AS 2293.1. 2. Photo luminescent exit sign are to comply with Specification 25.		Compliance Readily Achievable
E4D9 (E4.9)	**Emergency warning and intercom systems** An emergency warning and intercom system complying with AS 1670.4—2018 must be installed throughout the building.	An emergency warning and intercom system complying with AS 1670.4—2018 must be installed throughout the building.	Additional Details Required
Section F: Health and Amenity			
Part F1 – Surface water management, rising damp and external waterproofing			
F1D3 (F1.1)	**Stormwater drainage** Stormwater drainage must comply with AS/NZS 3500.3 – 2021.	Hydraulic plans and an associated design certificate prepared by a hydraulic engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause F1D3 • AS/NZS 3500.3—2021 **Note 1:** NCC 2022 has adopted the following standard revisions: • AS/NZS 3500.3 – 2021.	Additional Details Required
F1D4 *(New)*	**Exposed joints** Exposed joints in the drainage surface of a roof, balcony or podium are to be treated in accordance with Section 2.9 of AS4654.2	Accompanying design certification that has been prepared by the architect or weatherproofing consultant is to be provided that states compliance with: • BCA 2022 Clause F1D4 and AS 4654.2-2012.	Additional Details Required

Clause	Description	Comment	Status
F1D5 (F1.4)	**External above ground membranes** External waterproofing membrane systems for balconies, rooftop terraces and podiums must comply with AS 4654.1-2012 and AS 4654.2-2012.	Accompanying design certification that has been prepared by the architect **or** weatherproofing consultant is to be provided that verifies compliance with the following: • BCA 2022 Vol 1 Clause F1D5 • AS 4654.1-2012. • AS 4654.2-2012.	Additional Details Required
F1D6 (F1.9)	**Damp-proofing** Moisture from the ground must be prevented from reaching the walls above the damp proof course. Damp proof course must consist of a material that complies with AS/NZS 2904 or an impervious termite shield in accordance with AS 3660.1.	-	Compliance Readily Achievable
F1D7 (F1.10)	**Damp-proofing of floors on the ground** A vapour barrier in accordance with AS2870 is to be provided beneath the basement floor slab.	-	Compliance Readily Achievable
F1D8 (F1.12)	**Subfloor ventilation**	-	N/A
Part F2 – Wet areas and overflow protection			
F2D2 (F1.7)	**Wet area construction** Water proofing of wet areas within a building to comply with AS 3740.	**Note 1:** NCC 2022 has adopted the following Australian Standard revisions: • AS 3740-2021 – Waterproofing of wet areas.	Compliance Readily Achievable
F2D3 (F1.7b & c)	**Rooms containing urinals** Where a wall hung urinal is installed – (a) The wall must be surfaced with impervious materials extending from the floor to the top of the urinal and not less than 225mm on each side of the urinal; and (b) The floor must be surfaced with an impervious material and be graded to a floor waste.	-	Noted
F2D4 *(F1.11)*	**Floor wastes** 3. 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. 4. Where a floor waste is installed, the minimum continuous fall of a floor plane	Architectural and Hydraulic plans are to illustrate floor wastes to the bathroom and laundries located within class 2 sole-occupancy units. Details of proposed falls within bathrooms to be provided on plan.	Additional Details Required

Clause	Description	Comment	Status
	to the waste must be 1:80; and the maximum continuous fall of a floor plane must be 1:50.		
Part F3 – Roof and wall cladding			
F3D2 (F1.5)	**Roof coverings** A roof must be covered with an external waterproofing membrane complying with F1D5	-	Compliance Readily Achievable
F3D3 (F1.6)	**Sarking** Sarking type materials used for weatherproofing of roofs and walls must comply with AS/NZS 4200 Parts 1 and 2.	-	Compliance Readily Achievable
F3D4 (F1.13)	**Glazed assemblies** Windows, sliding doors with a frame, adjustable louvres, shopfronts and window walls with one piece framing in an external wall must comply with AS 2047 requirements for resistance to water penetration.	-	Compliance Readily Achievable
F3D5 (New)	**Wall cladding** External Wall cladding must comply with one or a combination of the following: • Masonry, including masonry veneer, unreinforced masonry and reinforced masonry. • Autoclaved aerated concrete (AS5146.3) • Metal wall cladding AS 1562.1	A performance solution report prepared by the architect or façade engineer is to be provided that— • states the façade complies with performance requirement F3P1. • lists the proposed external wall systems and includes any supporting documentation (e.g. CodeMark Certificate or an external wall system test report that demonstrates compliance with Verification Method F3V1).	Performance Solution
Part F4 – Sanitary and Other Facilities			

F4D2
(F2.1)
	Facilities in residential buildings
	Each Class 2 sole-occupancy unit requires the following facilities within the unit:
	• a kitchen sink and facilities for the preparation and cooking of food.
	• a bath or shower.
	• a closet pan.
	• a washbasin.
	• laundry facilities comprising of =
	  ○ at least one washtub,
	  ○ a space for a washing machine,
	  ○ and space for heat operated dyer in the same room within a
		Provision for required facilities shown.	Compliance Readily Achievable

Clause	Description	Comment	Status
	unit.		
F4D3 (F2.2)	**Calculation of number of occupants and fixtures**		Noted
F4D4 (F2.3)	**Facilities in Class 3 to 9 buildings** Toilet facilities are required in appropriate numbers based on the number of persons accommodated.	Confirm proposed common sanitary facilities proposed to serve ground floor retail tenancies.	Additional Details Required
F4D5 (F2.4a)	**Accessible sanitary facilities** At each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females. An accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and Where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and Where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations.	An accessibility report prepared by an accredited access consultant is to be provided that verifies the design complies with the following: • BCA 2022 Vol 1. • AS 1428.1—2009.	Additional Details Required
F4D6 (F2.4b)	**Accessible unisex sanitary compartments** The minimum number of accessible unisex sanitary compartments is as follows: • 1 on every storey containing sanitary compartments; and • Where a storey has more than one bank of sanitary compartments, at not less than 50% of those banks.	Details of a unisex accessible sanitary compartment serving the retail tenancies is to be provided. An accessibility report prepared by an accredited access consultant is to be provided that verifies the design complies with the following: • BCA 2022 Vol 1. • AS 1428.1—2009.	Additional Details Required
F4D7 (F2.4b)	**Accessible unisex showers**		N/A
F4D8 (F2.5)	**Construction of sanitary compartments** Where clear space between closet pan and doorway is less than 1.2m, doors must open outwards, slide or be readily removable from outside.	All hinged doors that swing inward to sanitary facilities and do not comply with achieving a 1200mm clearance to pan are required to be installed with lift-off hinges	Compliance Readily Achievable

Clause	Description	Comment	Status
			
F4D9 (F2.6)	**Interpretation: Urinals and washbasins**		Noted
NSW F4D10 (F2.7)	**Microbial (legionella) control**	Deleted in NSW	N/A
F4D11 (F2.8)	**Waste management**		N/A
F4D12 (F2.9)	**Accessible adult change facilities**		N/A
Part F5 – Room Heights			
F5D2 (F3.2)	**Height of rooms and other spaces** The following ceiling heights apply- **Class 2 residential portion:** • Kitchen, laundry or the like – 2.1m • Corridor, passageway or the like – 2.1m • Habitable room excluding a kitchen – 2.4m **Class 6 retail portion:** • Generally throughout – 2.4m • Corridor, passageway or the like – 2.1m **Class 7a carpark portions:** • General floor areas – 2.4m • Basement carpark – 2.1m (Note requirements under AS/NZS2890.6 – 2006 requires 2.2m leading to accessible car spaces and 2.5m above the actual accessible car spaces. **Generally** • Corridor, passageways or the like – 2.1m • Bathroom, sanitary compartment, car parking area store room or the like – 2.1m • A commercial kitchen – 2.4m; and • Above a stairway, landing or the like – 2m measured vertically above nosing of stairway treads or floor surface of landing	Ceiling heights throughout to be confirmed for the Construction Certificate.	Compliance Readily Achievable
Part F6 – Light and Ventilation			
F6D2	**Provision of natural light**		Applicable

Clause	Description	Comment	Status
(F4.1)	Natural light is required to all habitable rooms in a Class 2 building.		
F6D3 (F4.2)	**Methods and extent of natural lighting** Natural light is required to be provided to 10% of the floor area of a habitable room through windows or 3% of the floor area from roof lights. Windows required for natural light that face the boundary or a wall of the same building are to be a least 1m in distance or 50% of the square root of the exterior height of the wall in which the window in located, which is greater.	Natural lighting calculations prepared by the architect for habitable rooms located within residential SOUs are to be provided for review. **Note 1:** *Floor area* in relation to a room is the area of the room measured within the finished surfaces of the walls, and includes the area occupied by any cupboard or other built-in fixture, fixture or fitting.	Additional Details Required
F6D4 (F4.3)	**Natural light borrowed from adjoining room**	Borrowed light not relied upon.	N/A
F6D5 (F4.4)	**Artificial lighting** The artificial lighting system must comply with AS/NZS 1680.0—2009.	Electrical plans and an associated design certificate prepared by an electrical engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause F6D5. • AS/NZS 1680.0—2009.	Additional Details Required
F6D6 (F4.5)	**Ventilation of rooms** Ventilation shall be provided throughout the building in by means of natural ventilation complying with Clause F4.6 or mechanical ventilation complying with the requirements of AS 1668.2—2012 as required by Clause F4.5 of the BCA.	Mechanical plans and an associated design certificate prepared by a mechanical engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Clause F6D6 • AS 1668.2—2012.	Compliance Readily Achievable

F6D7
(F4.6)
	Natural ventilation
	Natural ventilation in accordance with F4.5 is required to consist of permanent openings, windows, or other devices which can be opened-
	• With an aggregate opening or openable size not less than 5% of the floor area of the room required to be ventilated; and
	• Open to the-
	  ○ suitably sized court, or space open to the sky;
	  ○ an open verandah, carport, or the like; or an adjoining room in accordance with F4.
		Confirm whether mechanical and natural ventilation is proposed to Class 2 habitable rooms.	Additional Details Required

F6D8 (F4.7)	**Ventilation borrowed from adjoining room**	Borrowed ventilation not relied upon.	N/A

Clause	Description	Comment	Status
F6D9 (F4.8)	**Restriction on location of sanitary compartments**	Sanitary facilities for retail tenancies not detailed on plan. To be assessed once detailed design is developed.	Compliance Readily Achievable
F6D10 (F4.9)	**Airlocks**		Noted
F6D11 (F4.11)	**Carparks** Every storey of the carpark is be provided with a mechanical ventilation system in accordance with AS 1668.2—2012.	Mechanical plans and an associated design certificate prepared by a mechanical engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause F6D11 • AS 1668.2—2012.	Additional Details Required
		Clause 3.10.2 and Clause 4.8 of AS 1668.2—2012 require that the carpark exhaust must be located not less than **6 m** from a property boundary or natural ventilation device (e.g. openable windows serving SOUs). The architectural plans are to be updated to illustrate the proposed car park exhaust location for review.	Noted
		Clause 4.4.2 of AS 1668.2-2012 does not permit jet fans to be utilised as a primary exhaust system in carparks. If jets fans are proposed as the primary carpark exhaust system, a performance solution prepared by a mechanical engineer will be required that demonstrates compliance with Performance Requirements F6P3 and F6P4 of the BCA 2022 Vol 1. **Note 1:** Clause 7.6.8.5 of AS 1670.1 – 2018 requires that areas of jet fan influence are to be served by a Class A aspirating smoke detection system.	Noted
F6D12 (F4.12)	**Kitchen local exhaust ventilation** A commercial kitchen must be provided with a kitchen exhaust hood complying with AS/NZS 1668.1—2015 and AS 1668.2—2012 where— • any cooking apparatus has a total maximum electrical power input exceeding 8 kW or a total gas power input exceeding 29 MJ/h; **or** • the total maximum power input to more than one apparatus exceeds 0.5 kW	Assuming future retail tenancies are forecast to contain food and beverage tenancies with commercial kitchens. If so, mechanical plans and an associated design certificate prepared by a mechanical engineer are to be provided for review. The design certificate is required to verify compliance with the following: • BCA 2022 Vol 1 Clause	Additional Details Required

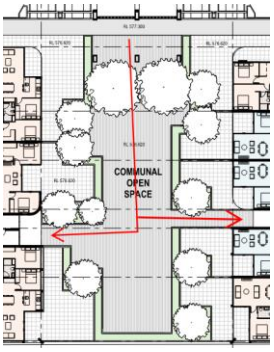
Clause	Description	Comment	Status
	electrical power or 1.8 MJ/hour gas, per m² of the room or enclosure.	F6D12. • AS/NZS 1668.1—2015. • AS 1668.2—2012. • AS 4254.2—2012. **Note 1:** Clause 6.2.2 of AS 1668.1—2015 requires that— • kitchen exhaust systems shall not serve more than one fire compartment. • shafts containing a kitchen exhaust duct serving one fire compartment shall not contain a kitchen exhaust duct serving another fire compartment. **Note 2:** The location of the kitchen exhaust discharge (Type B effluent) with a flow rate exceeding 1000 L/s shall be not less than 6 m from a property boundary, any boundary to a public street, any outdoor intake opening or any natural ventilation device or opening in accordance with Clause 3.10.3(c) of AS 1668.2—2012. Alternatively, the mechanical engineer is to demonstrate compliance with the C3.10.3 concessions.	
Part F7 – Sound Transmission and Insulation			
F7D2 (F5.1)	**Application of Part** Applicable to Class 2 buildings.	An acoustic assessment report that has been prepared by an acoustic consultant will need to be provided that verifies compliance with BCA 2022 Vol 1 Part F7.	Additional Details Required
F7D3 (F5.1)	**Determination of airborne sound insulation ratings** Construction required to have an airborne sound insulation rating must have the 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 ISO717.1 using result from laboratory measurements or comply with Specification 28 of the BCA.	Acoustic consultant to confirm compliance.	Compliance Readily Achievable
F7D4 (F5.3)	**Determination of impact sound insulation ratings** A floor required to have an impact sound insulation rating must have the required value for weighted normalised impact sound	Acoustic consultant to confirm compliance.	Compliance Readily Achievable

Clause	Description	Comment	Status
	pressure level with spectrum adaptation term ($L_{n,w}+C_I$) determined in accordance with AS/ISO 717.2 using results from laboratory measurements or comply with Specification 28 of the BCA. Walls that are required to have an impact sound insulation rating in a class 2 building must be of discontinuous construction.		
F7D5 (F5.4)	**Sound insulation rating of floors** Floors separating sole occupancy units or separating sole occupancy units from a plant room, lift shaft, public corridor, public lobby or the like or parts of different classifications must have an $R_w + C_{tr}$ of not less than 50 and an $L_{n,w} + C_I$ of not more than 62.	Acoustic consultant to confirm compliance.	Compliance Readily Achievable
F7D6 (F5.5)	**Sound insulation rating of walls** Walls must have an $R + C_t$ of not less than 50 if it separates sole occupancy units and an R_w of 50 if it separates a sole occupancy unit from a plant room, lift shaft, public corridor, public lobby or the like or parts of different classifications. Compliance with F5.3(b) is required if the wall separates a bathroom, sanitary compartment, laundry or kitchen in one sole occupancy unit from a habitable room (excluding a kitchen) in another adjoining unit or a sole occupancy unit from a plant room or lift shaft. Doors incorporated the walls that separate sole-occupancy units from a stairway, public corridor, public lobby or the like, provided the door assembly has an R_w not less than 30. Where a wall required to have sound insulation has a floor above, the wall must continue to the underside of the floor above or a ceiling that provides the sound insulation required for the wall. Where a wall required to have sound insulation has a roof above, the wall must continue to the underside of the roof above or a ceiling that provides the sound insulation required for the wall.	An acoustic assessment report that has been prepared by an acoustic consultant will need to be provided that verifies compliance with BCA 2022 Vol 1 Part F7.	Compliance Readily Achievable
		Walls separating— • SOUs units are required to achieve a sound insulation rating of Rw + Ctr of 50 • SOU units from a stairway, public corridor or the like are required to achieve a sound insulation rating of Rw 50 • A bathroom, sanitary compartment, laundry or kitchen in a SOU from a habitable room (excl. a kitchen) in an adjoining SOU, the wall is required to be of discontinuous construction. The architectural plans are to be updated to include the following items for review: • Wall setout plans. • A wall schedule that nominates the wall system manufacturer, wall system number (e.g. CSR123) and acoustic rating.	Compliance Readily Achievable
		Doors that separate Class 2 SOUs from a stairway, public corridor or the	Compliance Readily

Clause	Description	Comment	Status
		like are to achieve a Rw not less than 30. A door schedule is to be provided for review that nominates the acoustic rating for applicable doors.	Achievable
F7D7 (F5.6)	**Sound insulation rating of internal services** Services passing through more than one sole-occupancy unit must be separated from the rooms by construction with an $R_w + C_{tr}$ (airborne) not less than: a) 40 if the adjacent room is a habitable room (other than a kitchen); or b) 25 if the adjacent room is a kitchen or non-habitable room. Note if a stormwater pipe passes through a sole –occupancy unit it must be separated in accordance with (a) and (b).	An acoustic assessment report that has been prepared by an acoustic consultant will need to be provided that verifies compliance with BCA 2022 Vol 1 Part F7.	Compliance Readily Achievable
		The architectural plans are to be updated to include the following items for review: • Wall setout plans. • A wall schedule that nominates the wall system manufacturer, wall system number (e.g. CSR123) and acoustic rating.	Compliance Readily Achievable
F7D8 (F5.7)	**Sound isolation 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.		Compliance Readily Achievable
Part F8 – Condensation management			
F8D2 (F6.1)	**Application of part** This part applies to a sole-occupancy unit of a Class 2 building.		Applicable
F8D2 (F6.1)	**External wall construction** 1. Where a pliable building membrane is installed in an external wall it must: (d) comply with AS/NZS 4200.1; and (e) be installed in accordance with AS 4200.2; and (f) be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building. 4. Where a pliable building membrane, sarking or insulation layer is installed on the exterior side of the primary insulation layer on an external wall is must have a vapour permeance of not less than – (b) In climate zone 6, 7 and 8 1.14 ug/N.s. 5. 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	The wall schedule is to nominate the proposed pliable sarking membrane, and the associated product test certificate/specifications are to be provided for review including the vapour permeance level.	Additional Details Required

Clause	Description	Comment	Status
	materials by a drained cavity.		
F8D4 (F6.3)	**Exhaust systems** 1. An exhaust system installed in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of— (a) 25 L/s for a bathroom or sanitary compartment; and (b) 40 L/s for a kitchen or laundry. 2. Exhaust from a kitchen must be discharged 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 to a heat-condensing dyer unit. 5. An exhaust system that is not run continuously and is serving a bathroom or W/C that is not naturally ventilated, it must – (a) Be interlocked with the room's light switch; and (b) Include a run-on timer so the exhaust system continues to operate for 10 minutes after the light switch is turned off. 6. Except for natural ventilated dryer rooms, dryer cupboards must be provided with make-up air unless exempted by 4.	Mechanical plans and an associated design certificate prepared by a mechanical engineer are to be provided that verifies compliance with the BCA 2022 Vol 1 Clause F8D4.	Compliance Readily Achievable
F8D5 (F6.4)	**Ventilation of roof spaces** 1. In climate zones 6, 7 and 8, a roof must have a roof space that is — (a) Located above the primary insulation layer; or (c) Immediately above sarking with a vapour permeance of not less than 1.14 ug/N.s., which is immediately above the primary insulation layer; or (d) Immediately above ceiling insulation which meets the requirements of J3D7. (e) Has a height of not less than 20 mm; and (f) Ventilated to outdoor air through evenly distributed openings in accordance with Table F8D5 or is an unsarked tile roof. 2. The requirements of (1) do not apply to a	Concrete roof is proposed.	N/A

Clause	Description	Comment	Status
	concrete roof, or a roof that is made of structural insulated panels, or a roof that is subject to BAL FZ.		
Section G: Ancillary Provisions			
Part G1- Minor Structures and components			
NSW G1D2	**Swimming pools**		N/A
G1D3 (G1.2)	**Refrigerated chambers, strong rooms and vaults**		Compliance Readily Achievable
G1D4 (G1.3)	**Outdoor play spaces** Any outdoor play space in a Class 9b early childhood centre must be enclosed on all sides with a barrier which complies with AS 1926.1.	Applies to Class 9b early childhood centres	N/A
NSW G1D5	**Provision for cleaning windows** A safe manner of cleaning windows is to be provided as windows are located 3 or more storeys above ground level.	The windows must either be able to be cleaned wholly from within the building, or a method complying with the Construction Safety Act 1912 and Regulations is required.	Compliance Readily Achievable
Part G2 - Boilers, pressure vessels, heating appliances, fire places, chimneys and flues			**N/A**
G2D2 (G2.2)	**Installation of appliances**		N/A
G2D3 (G2.3)	**Open fireplaces**		N/A
G2D4 (G2.4)	**Incinerator rooms**		N/A
Part G3 - Atrium Construction			**N/A**
Part G4 - Construction in Alpine Areas			**N/A**
Part G5 - Construction in Bushfire Prone Areas			**N/A**
Part G6 – Occupiable outdoor areas			
G6D1 (G6.1)	**Application of Part** Applies to occupiable outdoor areas in addition to other deemed-to-satisfy provisions of the BCA. Part G6 takes precedent where there is a difference to the deemed-to-satisfy provisions of Sections C, D, E, F & G. Except for clause G6.2, Part G6 does not apply to occupiable outdoor areas of individual resident rooms or outdoor occupiable areas less than $10m^2$.	The communal open space on Level 1 is considered occupiable outdoor area under BCA definitions.	Applicable
G6D2 (G6.2)	**Fire hazard properties** A lining, material or assembly in an occupiable	Proposed materials used in outdoor occupiable areas are subject to C1.10	Compliance Readily

Clause	Description	Comment	Status
	outdoor area must comply with C1.10 as for an internal element. The following fire hazard properties of a lining, material or assembly in an occupiable outdoor area are not required to comply with C1.10: (i) Average specific extinction area. (ii) Smoke-Developed Index. (iii) Smoke development rate. (iv) Smoke growth rate index ($SMOGRA_{RC}$)	requirements as this clause.	Achievable
G6D3 (G6.3)	**Fire separation** For the purposes of the Deemed-to-Satisfy Provisions of C2.7, C2.8 and C2.9, a reference to a storey includes an occupiable outdoor area, however a fire wall cannot be used to separate an occupiable outdoor area into different fire compartments.	No change design required.	Noted
G6D4 (G6.4)	**Provision for escape** For the purposes of the Deemed-to-Satisfy Provisions of Part D1, a reference to a storey or room includes an occupiable outdoor area.	Egress requirements under Part D1 apply to occupiable outdoor areas. Confirm egress strategy from the communal open space. Egress back into the buildings will result in extended travel distances. Consultation with a fire engineer regarding potential performance solution allowances will likely be required. 	Does Not Comply
G6D5 (G6.5)	**Construction of exits** For the purposes of the Deemed-to-Satisfy Provisions of Part D2, a reference to a storey or room includes an occupiable outdoor area.	Construction of exits requirements under Part D2 apply to occupiable outdoor areas.	Noted
G6D6 (G6.6)	**Fire fighting equipment** Except for Clause 7(b)(i) of Specification E1.5, for the purposes of the Deemed-to-Satisfy Provisions of Part E1, a reference to a storey includes an occupiable outdoor area.	Fire fighting equipment required under Part E1 to be designed to include occupiable outdoor areas. Details of fire hydrant coverage to the communal open space is to be demonstrated for the Construction Certificate.	Additional Details Required
G6D7	**Lift installations**	Lift designs required under Part E3 to	Noted

Clause	Description	Comment	Status
(G6.7)	For the purposes of the Deemed-to-Satisfy Provisions of Part E3, a reference to a storey includes an occupiable outdoor area.	be designed to include occupiable outdoor areas.	
G6D8 (G6.8)	**Visibility in an emergency, exit signs and warning systems** For the purposes of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area.	Emergency lighting, exits signs and emergency warning and intercom systems to be designed to include occupiable outdoor areas. Details of compliance will be required for the Construction Certificate	Additional Details Required
G6D9 (G6.9)	**Light and ventilation** For the purposes of the Deemed-to-Satisfy Provisions of F4.4, F4.8 and F4.9, a reference to a room includes an occupiable outdoor area.		Noted
G6D10 (G6.10)	**Fire orders** For the purposes of the Deemed-to-Satisfy Provisions of G4.9, a reference to a storey includes an occupiable outdoor area.		Noted
Part G7 – Liveable housing design			
NSW G7D2 (new)	**Livable housing design** *This Part has deliberately been left blank. Part G7 does not apply in NSW as livable housing design requirements do not apply to sole-occupancy units in a Class 2 building in NSW.*	-	N/A
Section I: Special Use Buildings			

Clause	Description	Comment	Status
Part I1 - Class 9b Buildings			**N/A**
Part I2 - Public Transport Buildings			**N/A**
Part I3 - Farm Building and Farm Sheds			**N/A**
NSW Part I4 - Entertainment venues other than temporary structures and drive-in theatres			**N/A**
NSW Part I5 Temporary structures			**N/A**
NSW Part I6 Drive-in theatres			**N/A**
NSW Section J: Energy Efficiency Energy Efficiency for buildings requires buildings to reduce greenhouse gas emissions by efficiently using energy. A building's services must have features that facilitate the efficient use of energy. The discipline of Energy Efficiency with the BCA has become a specialised field where compliance with BCA Section J is to be certified with the issue of a Certificate of Compliance – Design from the relevant Services Engineer/Consultant. The purpose of this section is to provide a brief explanation of which areas are to achieve compliance with BCA Section J – Energy Efficiency during design and construction. The BCA should be referenced for exact requirements, clarification and further explanation.			
Sec J	**Energy efficiency measures** Energy efficiency measures are prescribed for the following building elements to limit energy consumption: • Building fabric • External glazing • Building sealing • Air movement. • Air-conditioning and ventilation systems. • Artificial lighting and power • Hot water supply • Access for maintenance	Assessment by an Energy Efficiency consultant is to be carried out and Section J Compliance Report provided for the Construction Certificate.	Additional Details Required
Part J2 – Energy efficiency			
NSW J2D1 (J0.0)	**Deemed to satisfy provisions**	The building is located within Climate Zone 7.	Noted
Part J3 – Elemental provisions for sole-occupancy units			
NSW J3D2 (New)	**Application of part** The deemed-to-satisfy provisions of this part apply to a building element forming the external building fabric of a class 2 building and a class 4 part of a building.	-	Applicable
NSW J3D3 (J0.2)	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
NSW J3D4 (J0.3)	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
J3D5	**Roof thermal breaks of a sole-occupancy unit of a class 2 building or a class 4 part of a**	Proposed roof will not include metal	N/A

Clause	Description	Comment	Status
(J0.4)	**building**	roofing.	
J3D6 (J0.5)	**Wall thermal breaks of a sole-occupancy unit of a class 2 building or a class 4 part of a building**	A metal-framed wall that forms part of the building envelope must have a thermal break, consisting of a material with an R-Value of not less than R0.2, installed at all points of contact between the external cladding and the metal frame if the wall— (a) does not have a wall lining or has a wall lining that is fixed directly to the same metal frame; and (b) is clad with weatherboards, fibre-cement or the like, or metal sheeting fixed to a metal frame.	Compliance Readily Achievable
NSW J3D7 (New)	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
NSW J3D8 (New)	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
NSW J3D9 (New)	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
NSW J3D10 (New)	**Floors of a sole-occupancy unit of a class 2 building or a class 4 part of a building**	A concrete slab-on-ground with an in-slab or in-screed heating or cooling system must have insulation with an R-Value at least 1.0 installed around the vertical edge of tis perimeter.	Compliance Readily Achievable
NSW J3D11 (New)	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
NSW J3D12 (New)	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
NSW J3D13 (New)	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
NSW J3D14 (New)	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
NSW J3D15 (New)	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
Part J4 – Building Fabric			

Clause	Description	Comment	Status
NSW J4D2 (J1.1)	**Application of Part**	(1) The Deemed-to-Satisfy Provisions of this Part apply to building elements forming the envelope of a Class 3 and Class 5 to 9 building. (2) NSW J4D3, applies to building elements forming the envelope of a sole-occupancy unit in a Class 2 building and a Class 4 part of a building. (3) (2) only applies to thermal insulation in a sole-occupancy unit in a Class 2 building and a Class 4 part of a building where a development consent specifies that the insulation is to be provided as part of the development.	Noted
NSW J4D3 (J1.2)	**Thermal construction – general** Insulation must comply with AS/NZS 4859.1 and be installed in accordance with Clause NSW J4D3.	A section J / J1V3 report that has been prepared by an energy efficiency consultant is to be provided. The architectural plans are to nominate the following values identified in the report: • R-Values for the roof, floor, and wall sections. • U-Values and SHGCS on the window and door schedules.	Additional Details Required
J4D4 (J1.3)	**Roof and ceiling construction** A roof or ceiling must achieve a Total R-Value greater than or equal to R3.7 for an upward direction of heat flow. The solar absorptance of the upper surface of a roof must not be more than 0.45.	A Section J/J1V3 report that has been prepared by an energy efficiency consultant is to be provided.	Additional Details Required
J4D5 (J1.4)	**Roof lights** Roof lights must have— (a) a total area of not more than 5% of the floor area of the room or space served; and (b) transparent and translucent elements, including any imperforate ceiling diffuser, with a combined performance of— (i) for Total system SHGC, in accordance with Table J1.4; and (ii) for Total system U-Value, not more than U3.9	A Section J/J1V3 report that has been prepared by an energy efficiency consultant is to be provided.	Additional Details Required
NSW J4D6 (J1.5)	**Walls and glazing** The Total System U-Value of wall-glazing construction must not be greater than U2.0 for non- Class 2 portions. The Total System U-Value of wall-glazing	A Section J/J1V3 report that has been prepared by an energy efficiency consultant is to be provided.	Additional Details Required

Clause	Description	Comment	Status
	construction must be calculated in accordance with Specification 37 and the requirements of this clause. The solar admittance of externally facing wall-glazing construction must be greater than the values specified in Table J4D6 and are to be calculated in accordance with Specification 37.		
J4D7 (J1.7)	**Floors** The floor must achieve a Total R-Value of 2.0 for downwards heat flow.	A Section J/JV3 report that has been prepared by an energy efficiency consultant is to be provided.	Additional Details Required
Part J5 - Building Sealing			
NSW J5D2 (J3.1)	**Application of Part**	Applies to elements forming the envelope.	Applicable
J5D3 (J3.2)	**Chimneys and flues**	No chimneys and flues shown.	N/A
J5D4 (J3.3)	**Roof lights** A roof light must be sealed, or capable of being sealed, when serving— (i) a conditioned space; or (ii) a habitable room in climate zones 4, 5, 6, 7 or 8. A roof light required by (a) to be sealed, or capable of being sealed, must be constructed with— (i) an imperforate ceiling diffuser or the like installed at the ceiling or internal lining level; or (ii) a weatherproof seal; or (iii) a shutter system readily operated either manually, mechanically or electronically by the occupant.	No roof lights shown.	Compliance Readily Achievable
NSW J5D5 (J3.4)	**Windows and doors** A seal to restrict air infiltration must be fitted to each edge of an external door, openable external window or the like when serving a conditioned space. An entrance to a building, if leading to a conditioned space must have an airlock, self-closing door, rapid roller door, revolving door or the like, other than— (a) where the conditioned space has a floor area of not more than 50 m2; or (b) where a café, restaurant, open front shop or the like has— space; and (i) a 3 m deep un-conditioned zone between the main entrance, including an open front, and the (ii) conditioned at all other entrances to the café, restaurant, open front shop or the like, self-closing doors.		Compliance Readily Achievable

Clause	Description	Comment	Status
	(c) A loading dock entrance, if leading to a conditioned space, must be fitted with a rapid roller door or the like.		
J5D6 (J3.5)	**Exhaust fans** A miscellaneous exhaust fan must be fitted with a sealing device such as a self-closing damper or the like when serving a conditioned space.		Compliance Readily Achievable
J5D7 (J3.6)	**Construction of roofs, walls and floors** Roofs, walls, floors and any opening must be constructed to minimise air leakage in accordance with Clause J5D7 when forming part of the external fabric of a conditioned space. These requirements do not apply to openings, grilles and the like required for smoke hazard management.		Compliance Readily Achievable
J5D8 (J3.7)	**Evaporative coolers**		N/A
Part J6 - Air-conditioning and Ventilation Systems			
NSW J6D2 (J5.1)	**Application of Part**	Applies to the building. Clause J6D10 does not apply to the Class 2 portion.	Applicable
J6D3 (J5.2)	**Air-conditioning system control** An air-conditioning system must be capable of being deactivated when the building or part of a building served by that system is not occupied. An air-conditioning system must comply with requirements specified under this clause.	Design certification that has been prepared by a mechanical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J6	Compliance Readily Achievable
J6D4 (J5.3)	**Mechanical ventilation system control** The mechanical ventilation system must comply with the requirements specified under this clause.	Design certification that has been prepared by a mechanical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J6	Compliance Readily Achievable
J6D5 (J5.4)	**Fan systems** Fans, ductwork and duct components that form part of an air-conditioning system or mechanical ventilation system must comply with the requirements of thus clause.	Design certification that has been prepared by a mechanical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J6	Compliance Readily Achievable
J6D6 (J5.5)	**Ductwork insulation** Ductwork and fittings in an air-conditioning system must be provided with insulation complying with the requirements of this clause.	Design certification that has been prepared by a mechanical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J6	Compliance Readily Achievable
J6D7	**Ductwork sealing**	Design certification that has been prepared by a mechanical engineer is	Compliance Readily

Clause	Description	Comment	Status
(J5.6)	Ductwork in an air-conditioning system with a capacity of 3000 L/s or greater, not located within the only or last room served by the system, must be sealed against air loss in accordance with the duct sealing requirements of AS 4254.1 and AS 4254.2 for the static pressure in the system.	to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J6	Achievable
J6D8 (J5.7)	**Pump systems** Pumps and pipework that form part of an air-conditioning system must comply with the requirements of this clause.	Design certification that has been prepared by a mechanical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J6	Compliance Readily Achievable
J6D9 (J5.8)	**Pipework insulation** Piping, vessels, heat exchangers and tanks containing heating or cooling fluid, where the fluid is held at a heated or cooled temperature, that are part of an air-conditioning system, other than in appliances covered by MEPS, must be provided with insulation complying with the requirements of this clause.	Design certification that has been prepared by a mechanical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J6	Compliance Readily Achievable
NSW J6D10 (J5.9)	**Space heating** A heater used for air-conditioning or as part of an air-conditioning system must comply with the requirements of this clause.	Design certification that has been prepared by a mechanical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J6	Compliance Readily Achievable
J6D11 (J5.10)	**Refrigerant chillers** An air-conditioning system refrigerant chiller must comply with MEPS and the full load operation energy efficiency ratio and integrated part load energy efficiency ratio in Table J5D11a or Table J6D11b when determined in accordance with AHRI 551/591.	Design certification that has been prepared by a mechanical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J5	Compliance Readily Achievable
J6D12 (J5.11)	**Unitary air-conditioning equipment** Unitary air-conditioning equipment including packaged air-conditioners, split systems, and variable refrigerant flow systems must comply with the requirements of this clause.	Design certification that has been prepared by a mechanical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J6	Compliance Readily Achievable
J6D13 (J5.12)	**Heat rejection equipment** The motor rated power of a fan in a cooling tower, closed circuit cooler or evaporative condenser must not exceed the allowances in Table J6D13. The fan in an air-cooled condenser must have a motor rated power in accordance with the requirements of this clause	Design certification that has been prepared by a mechanical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J6	Compliance Readily Achievable
Part J7 - Artificial Lighting and Power			
NSW J7D2	**Application of Part**	Applies to the building.	Applicable

Clause	Description	Comment	Status
(J6.1)			
NSW J7D3 (J6.2)	**Artificial lighting** For artificial lighting, the aggregate design illumination power load must not exceed the sum of the allowances obtained by multiplying the area of each space by the maximum illumination power density in Table J7D3a. Aggregate design illumination power is to be calculated in accordance with requirements of this clause.	Design certification that has been prepared by an electrical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J7 and Specification 40.	Compliance Readily Achievable
NSW J7D4 (J6.3)	**Interior artificial lighting and power control** The power control for artificial interior lighting must comply with the requirements of Clause J7D4. Artificial lighting of a room or space must be individually operated by a switch or other control device in accordance with Specification 40.	Design certification that has been prepared by an electrical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J7 and Specification 40.	Compliance Readily Achievable
J7D5 (J6.4)	**Interior decorative and display lighting** Interior decorative and display lighting, such as for foyer mural or art displays, must be controlled separately from other artificial lighting as specified in Clause J7D5. Window display lighting must be controlled separately from other display lighting.	If applicable design certification that has been prepared by an electrical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J7 and Specification 40.	Compliance Readily Achievable
J7D6 (J6.5)	**Artificial lighting around the perimeter of a building** Artificial lighting around the perimeter of a building must be controlled by a daylight sensor or time switch as specified in Clause J7D6.	Design certification that has been prepared by an electrical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J7 and Specification 40.	Compliance Readily Achievable
J7D7 (J6.6)	**Boiling water and chilled water storage units** Power supply to a boiling water or chilled water storage unit must be controlled by a time switch in accordance with Specification 40.	Design certification that has been prepared by an electrical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J7 and Specification 40.	Compliance Readily Achievable
J7D8 (J6.7)	**Lifts** Lifts must be configured to:- • ensure artificial lighting and ventilation in the car are turned off when it is unused for 15 minutes; • achieve the idle and standby energy performance level in Table J7D8a • achieve the energy efficiency class in Table J7D8b; or if a dedicated goods lift energy efficiency class D in accordance with ISO 25745-2.	Design certification that has been prepared by an electrical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Part J7 and Specification 40.	Compliance Readily Achievable

Clause	Description	Comment	Status
J7D9 (J6.8)	**Escalators and moving walkways**	-	N/A
Part J8 - Heated Water Supply and Swimming Pool and Spa Pool Plant			
NSW J8D1	**Deemed to satisfy provisions.**	-	-
J8D2 (J7.2)	**Heated water supply** A heated water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NCC 2022 Volume Three – Plumbing Code of Australia	Design certification that has been prepared by a hydraulic engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Clause J8D2 and Part B2 of NCC 2022 Volume 3.	Compliance Readily Achievable
NSW J8D3 (J7.3)	**Swimming pool hearing and pumping**	-	N/A
NSW J8D4 (J7.4)	**Spa pool heating and pumping**	-	N/A
Part J9 - Energy monitoring and on-site distributed energy resources			
NSW J9D2 (J8.1)	**Application of Part**	Applies to the building.	Applicable
J9D3 (J8.3)	**Facilities for energy monitoring** A building with a floor area of more than 2,500m^2 must have the facility to record individually the energy consumption of: I. air-conditioning plant including, where appropriate, heating plant, cooling plant and air handling fans; and II. artificial lighting; and III. appliance power; and IV. central hot water supply; and V. internal transport devices including lifts, escalators and travelators where there is more than one serving the building; and VI. other ancillary plant. Energy meters required by (b) must be interlinked by a communication system that collates the time-of-use energy consumption data to a single interface monitoring where it can be stored, analysed and reviewed. The provisions above do not apply to energy meters serving a Class 2 building where the total floor area of the common	Design certification that has been prepared by an electrical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Clause J9D3.	Compliance Readily Achievable

Clause	Description	Comment	Status
	areas is less than 500 m2; or individual sole-occupancy units with a floor area of less than 2 500 m2.		
J9D4 (New)	**Facilities for electric vehicle charging equipment** A carpark associated with a class 2, 3, 5, 6, 7b, 8 or 9 building must be provided with electrical distribution boards dedicated to electric vehicle charging – (a) In accordance with Table J9D4 in each storey of the carpark. Table J9D4: Electric vehicle distribution board requirement for each storey of a carpark *Carpark* spaces per *storey* for electric vehicles / Electrical distribution boards for electric vehicle charging per *storey* 0 - 9 / 0 10 - 24 / 1 25 - 48 / 2 49 - 72 / 3 73 - 96 / 4 97 - 120 / 5 121 - 144 / 6 145 - 168 / 7 (b) Labelled to indicate use for electric vehicle charging equipment. Electrical distribution boards dedicated to serving electric vehicle charging in a carpark must – (a) Be fitted with a charging control system with the ability to manage and schedule charging of electrical vehicles in response to total building demand; and (b) When associated with a class 5 to 9 building, have capacity for each circuit to support an electric vehicle charger able to deliver a minimum of 12 kWh from 9:00 am to 5:00 pm daily; and Be sized to support the future installation of a 7 kW (32 A) type 2 electric vehicle charge in 10% of car parking spaces associated with a class 5 building.	Electrical service plans and design certification that has been prepared by an electrical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Clause J9D4. Indicate the location of the dedicated distribution boards to serve the electric vehicle charging points.	Compliance Readily Achievable
J9D5 (New)	**Facilities for solar photovoltaic and battery systems** The main electrical switchboard of a building must – (a) Contain at least two empty three-phase circuit breaker slots and four DIN rail spaces labelled to indicate the use of each space for a solar photovoltaic system and a battery system. (b) Be sized to accommodate the installation of solar photovoltaic panels producing their maximum	Design certification that has been prepared by an electrical engineer is to be provided that verifies compliance with – • BCA 2022 Vol. 1 Clause J9D5.	Compliance Readily Achievable
		The project's architect is to verify the proposed solar photovoltaic panels on the roof make-up 20% of the overall roof area.	Compliance Readily Achievable

Clause	Description	Comment	Status
	electrical output of at least 20% of the building roof area. At least 20% of the roof area of a building must be left clear for the installation of solar photovoltaic panels, except for buildings - (a) Installed with solar photovoltaic panels on at least 20% of the roof area or an equivalent generation capacity elsewhere on the site. (b) Where 100% of the roof area is shaded for more than 70% of daylight hours. (c) Roof areas not more than 55 m2 (d) Where more than 50% of the roof area is used as a terrace, carpark, roof garden, roof light or the like.		

13. Appendix A – Referenced Documentation

The following documentation was used in the preparation of this report:

Drawing No.	Title	Issue	Date	Drawn by
DA011	Site Plan	03	10.11.23	Dezignteam
DA102	Ground Floor Plan	04	24.11.23	Dezignteam
DA103	Level 1 Floor Plan	03	10.11.23	Dezignteam
DA104	Level 2 Floor Plan	04	24.11.23	Dezignteam
DA105	Level 3 Floor Plan	04	24.11.23	Dezignteam
DA106	Level 4 Floor Plan	04	24.11.23	Dezignteam
DA107	Level 5 Floor Plan	03	10.11.23	Dezignteam
DA108	Level 6 Floor Plan	03	10.11.23	Dezignteam
DA109	Level 7 Floor Plan	03	10.11.23	Dezignteam
DA110	Level 8 Floor Plan	03	10.11.23	Dezignteam
DA111	Level 9 Floor Plan	03	10.11.23	Dezignteam
DA112	Roof Floor Plan	04	24.11.23	Dezignteam
DA200	Elevations 01	03	10.11.23	Dezignteam
DA201	Elevations 02	03	10.11.23	Dezignteam
DA202	Elevations 03	03	10.11.23	Dezignteam
DA300	Section A & B	03	10.11.23	Dezignteam
DA301	Section C & D	03	10.11.23	Dezignteam

14. Appendix B – Statutory Fire Safety Measures

Schedule of Statutory Fire Safety Measures.

Measure	Standard of Performance
Access Panels, Doors And Hoppers To Fire Resisting Shafts	BCA 2022 Volume 1 Clause C4D14 and tested prototypes (AS 1530.4 – 2014)
Automatic Fail Safe Devices	Scheduled devices release upon trip of smoke detection and sprinkler activation in accordance with BCA 2022 Volume 1 Clause D3D6.
Automatic Fire Detection And Alarm System *(Combined Smoke Alarm and Smoke Detection System)*	BCA 2022 Volume 1 Clause S20C45of Specification 20, AS 1670.1 – 2018 and AS 3786 - 2014
Automatic Fire Detection and Alarm System *(Smoke Detection System to Stair Pressurisation System)*	BCA 2022 Volume 1 Clause S20C6 of Specification 20 and AS 1670.1 – 2018
Automatic Fire Suppression Systems *(Sprinklers)*	BCA 2022 Volume 1 Specification 17 and AS 2118.1 – 2017
Building Occupant Warning System	BCA 2022 Volume 1 Clause S20C7 of Specification 20 and AS 1670.1 – 2018
Emergency Lifts	BCA 2022 Volume 1 Clause E3D5.
Emergency Lighting	BCA 2022 Volume 1 Clause E4D2, E4D4 and AS/NZS 2293.1 – 2018
Emergency Warning and Intercommunication System	BCA 2022 Volume 1 Clause E4D9 and AS 1670.4 – 2018
Exit Signs	BCA 2022 Volume 1 Clause E4D5, E4D6, E4D8 and AS/NZS 2293.1 – 2018
Fire Dampers (tbc)	BCA 2022 Volume 1 Clause C4D15 and AS 1668.1 – 2015 (AS 1682.1 – 2015 and AS 1682.2 – 2015)
Fire Doors	BCA 2022 Volume 1 Specification 12 and AS/NZS 1905.1 – 2015
Fire Hydrants Systems	BCA 2022 Volume 1 Clause E1D2 and AS 2419.1 – 2021
Fire Seals Protecting Opening In Fire Resisting Components Of The Building	BCA 2022 Volume 1 Clause C34D15, Specification 13, AS 1530.4 – 2014, AS 4072.1 – 2005 and installed in accordance with the tested prototype.
Hose Reel System	BCA 2022 Volume 1 Clause E1D3 and AS 2441 – 2005
Lightweight Construction	BCA 2022 Volume 1 Specification 6 and AS 1530.4 – 2014
Mechanical Air Handling System *(Automatic Air Pressurisation System)*	BCA 2022 Volume 1 Clause E2D4 and AS 1668.1 – 2015
Mechanical Air Handling System *(Carpark Mechanical Ventilation System)*	BCA 2022 Volume 1 Clause E2D12, Clause 5.5 of AS/NZ 1668.1 – 2015 and fans with metal blades suitable for operation at normal temperature may be used and the electrical power and control cabling need not be fire rated
Portable Fire Extinguishers	BCA 2022 Volume 1 Clause E1D14 and AS 2444 – 2001
Warning And Operational Signs	BCA 2022 Volume 1 Clauses D3D28, D4D7 and Specification 15

Note 1: The fire safety schedule will need to be amended subject to the inclusion of a fire engineered performance solution.

15. Appendix Specification 5 – Fire Rating Requirements

a. Type A Construction

Table 1 S5C11a: Type A construction: FRL of loadbearing parts of external walls

Distance from a *fire-source feature*	FRL (in minutes): *Structural adequacy/ Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 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 2 S5C11b: Type A construction: FRL of non-loadbearing parts of external walls

Distance from a *fire-source feature*	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 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 3 S5C11c: Type A construction: FRL of external columns not incorporated in an external wall

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

Table 4 S5C11d: Type A construction: FRL of common walls and fire walls

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

Table 5 S5C11e: Type A construction: FRL of loadbearing internal walls

Location	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 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 6 S5C11f: Type A construction: FRL of non-loadbearing internal walls

Location	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 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 7 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*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 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

16. Appendix C2D11 – Early Fire Hazard Properties for Materials

Floor materials, floor coverings, and wall and ceiling lining materials are required to comply with BCA prescribed fire hazard properties.

Floor linings and floor coverings	
General Non Sprinklered Areas	Minimum 2.2 kw/m^2 critical radiant heat flux (or 4.5 kw/m^2 critical radiant heat flux for Class 3 areas and 9a patient care areas) and a maximum smoke development rate of 750 percent-minutes
General Sprinklered Areas	Minimum 1.2 kw/m^2 critical radiant heat flux (or 2.2 kw/m^2 critical radiant heat flux for Class 3, 9a patient care, and 9c residential use areas)
Fire Isolated Exits and Fire Control Rooms	Minimum 2.2 kw/m^2 critical radiant heat flux (or 4.5 kw/m^2 critical radiant heat flux for Class 3, 9a and 9c areas)
Lift Cars	Minimum 2.2 kw/m^2 critical radiant heat flux

Wall linings and ceiling linings	
Generally	Variously Group 1, 2 or 3 materials (more restrictive Group number for non-sprinklered areas, public corridors, health care corridors and other prescribed locations) when tested to AS/ISO 9705 or the BCA2022 Volume 1, Specification A2.4, Clause 3 and AS/NZS 3837
Fire Isolated Exits	Group 1 material when tested as above
Lift Cars	Group 1 or 2 materials when tested as above

In addition, wall and ceiling linings in non-sprinklered areas must have a smoke growth rate index not more than 100 or an average specific extinction area less than 250 m^2/g.

Other than above, construction materials generally need to achieve as 1530.3-1999 early fire hazard indices requirements	
Generally	Spread of flame Index not > 9 Smoke developed index not > 8
Sarking	Flammability Index not > 5
Fire Isolated Exits and Fire Control Rooms	Spread of Flame Index 0 Smoke Developed Index not > 2 Sarking Flammability 0
Non-Fire Isolated Stairs & Escalators and Auditorium Fixed Seating	Spread of Flame Index 0 Smoke Developed Index not > 5
Lifts	To AS 1735.2
Air Ducts	To AS 4254

17. Appendix C3D3 – Floor Areas and Volumes

Floor areas and volumes of each storey are listed in the following table:

To be completed on further development plans.

Floor	Approximate area (m^2)	Approximate volume (m^3)	Comment
Ground			
Level 1			
Level 2			

Nominated Fire Compartments

Compartment	Approximate area (m^2)	Approximate volume (m^3)	Comment

18. Appendix D2D5 – Exits

The exits from the building are set out in the following table:

To be completed on further development plans.

Exit No	Location	Type	Grid Ref	No of storeys connected / passed by	Comments
1.					
2.					
3.					

19. Appendix D3D29 – Protection of Openable Windows

BUILDING USE	OPENABLE WINDOWS		
	<2m above surface beneath	>2m above surface beneath	>4m above surface beneath
Bedrooms	No restrictions	Window located below 1.7m above bedroom floor: • Must be protected by device to restrict window opening **OR** screen with secure fittings; AND • No opening greater than 125mm; AND • Device and screen must resist outward horizontal action of 250N; AND • Have child resistant release if device or screen is able to be removed, unlocked or overridden; AND • If device or screen is able to be removed, unlocked or overridden minimum 865mm barrier required to protect window. Note: No 865mm barrier required if device or screen is permanent and cannot be removed, unlocked or overridden Window located min. 1.7m above bedroom floor • No restrictions	Comments as per >2m above surface beneath
Other rooms (i.e. lounge, dining room etc)	No restrictions	No restrictions	Barrier required • Min. 865mm above floor • No openings exceeding 125mm • No climbable elements between 150-760mm above floor
All other buildings	No restrictions	No restrictions	Barrier required • Min. 865mm above floor • No openings exceeding 125mm • No climbable elements between 150-760mm above floor

20. Appendix D4 – Significant Accessibility Requirements

Access for wheelchair users and people with disabilities generally must be to AS1428.1—2009. Principle requirements include the following:

- Continuous accessible paths of travel throughout.
- Minimum 1 m wide travel paths with maximum 3-5 mm joints, lips, level changes etc.
- No deep pile carpets or grates with large slots.
- Walls or 75-150 mm kerbs at travel path sides or if level change occurs to cause a wheelchair hazard.
- 1.8 m wide x 2 m long wheelchair passing spaces at 20 m intervals in passageways where a direct line of sight is not available.
- Turning spaces at 20 m intervals and within 2 m of dead-end access ways. 1.5 m wide x 1.5 m long, 90° turning spaces (with splayed internal corner) and 1.54 m wide x 2.07 m long, 180° turning spaces are required including at dead ends in passageways.
- Step ramps, kerb ramps and threshold ramps as prescribed.
- 1:14 maximum ramps with 9 m between landings.
- 1.9 m x 1 in 10 (maximum 190 mm rise) step ramps.
- 1.52 m x 1 in 8 (maximum 190 mm rise) kerb ramps.
- 30-50 mm handrails with 300 mm extensions and curls and 50 mm clearances on both sides of steps, ramps, etc.
- 850 mm clear width doors with 340 – 900 mm latch side clearances and 1220-1670 mm approach clearances depending on arrangements.
- Stairs and ramps set back from building lines and corridors to allow space for handrail extensions and TGSIs.
- Decals to glazing.
- 900-1100 mm door hardware height.
- Lever handle hardware with low opening forces.
- Landings at doorways, direction changes and at intervals on ramps and inclined walkway.
- Walkways with colour contrast borders.
- Flat even surfaces.
- Colour contrasted hand rails and door frames.
- "D" pull handles to doors.
- Continuous protected paths from disabled persons' car spaces to lifts, access points, etc.
- Ambulant disabled persons' toilets with grab rails and outward swinging doors or longer cubicles.
- Prescribed types of water entry arrangements for swimming pools depending on pool size.
- Non fire enclosed stairs with opaque risers.
- Fire stairs and non-fire enclosed stairs with colour contrasting nosing strips.
- All switches and controls 900-1100 mm above floor level.

The following general requirements apply to accessible toilets:

- Unisex facility.
- 1.9 x 2.7 m or 2.3 x 2.4 m minimum room dimensions depending on arrangements (2.2 x 1.6 m if AS 1428.1-2001 concession applies).
- 30-40 mm grab rails with 50-60 mm clearances.
- Doors with appropriate clearances and circulation spaces and able to be operated externally in emergencies.
- Washbasins with clearances as required.
- Shielded hot water pipes.
- Mirror, shelf, dispensers and coat hooks.
- Mirrored layout for alternative facilities.

21. Appendix F4D4 – Requirements for Sanitary Facilities

To be completed on further development plans.

The status of sanitary facilities required by Part F4 of the BCA are set out below.

Class	Use	Occupant Numbers Total		WC Required / Provided		Urinal Required / Provided		Basin Required / Provided	
			Male						
			Female			N/A			
			Unisex Disabled			N/A			
			Male						
			Female			N/A			
			Unisex Disabled			N/A			
	TOTAL		**Male**						
			Female			**N/A**			
			Unisex Disabled			**N/A**			

Notes:

1. A common accessible unisex accessible facility may be counted once for both male and female facilities in accordance with Clause F4D3(3) of the BCA.
2. Staff and patrons are permitted to share the same facilities in accordance with Clause F4D4(5) of the BCA.
3. At least one ambulant sanitary compartment must be provided within each of the male and female facilities that complies with Section 16 of AS 1428.1 – 2009, unless—
   - Not more than 10 people are employed; or
   - The majority of employees are of one sex and not more than 2 employees of the other sex share the same sanitary facilities.
4. Sanitary facilities need not be provided for patrons if the total number of persons accommodated in the building is not more than 20.
5. A WC is able to be used in place of a urinal.

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