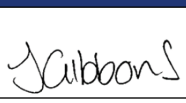
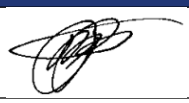
BCA Design Compliance Report (BCA Consultant)

231 Whale Beach Road – Shop-top housing development
Prepared for: Lescil A. Cassar AM
Our Ref: 23000575 | Issue date: 21 August 2024

Contents

Authorisation

Revision	Comment / Reason for Issue	Issue Date	Prepared by	Reviewed by
03	FEBQ submission	21 August 2024	 Scott Gibbons	 Matthew Marks

Revision History

Revision	Comment / Reason for Issue	Issue Date	Prepared by
01	Design Development	11-Aug-23	Scott Gibbons
02	Tender Submission	5 June 2024	Scott Gibbons
03	FEBQ submission	21 August 2024	Scott Gibbons

Commercial in Confidence

1 Executive Summary

Modern Building Consultants (MBC Group) as the appointed BCA Consultant for the proposed development, have reviewed architectural design documents prepared by Richard Cole Architecture (refer appendix A) for compliance with the National Construction Code - Building Code of Australia Volume One 2022 (referred to as BCA).

1.1 Performance Solutions - Fire & Life Safety

The assessment of the design documentation has revealed that the following areas are required to be assessed against the relevant Performance Requirements of the BCA. The submission for a Construction Certificate will need to include verification from a Certifier – Fire Safety, where determined permissible under A2G1 of the BCA, for the following aspects: -

DTS Clause	Description of Non-Compliance	Performance Requirement
D2D12	**Travel via fire-isolated exits** The path of travel from the proposed fire isolated stair at level 3 discharges within 6m from the lift lobby entrance. Entrance door and surrounding areas to achieve a FRL of 60/60/60. Openings are not proposed to be protected in accordance with this clause.	D1P2, D1P5, E2P2
D2D12	**Travel via fire-isolated exits** A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated. Fire sprinkler & pump room to be provided with an air lock or smoke lobby in lieu of direct entrance into a fire isolated stair.	E1P3
D3D25	**Swinging doors** Ground floor - surf Road Level 3 - Whale Beach Road The nominated exits door do not swing in the direction of egress	D1P2, E2P2

DTS Clause	Description of Non-Compliance	Performance Requirement
E1D4 or E1D2	**Non-Provision of Large Bore Sprinkler Suction Booster OR Non-Compliant Vertical Lift for Large Bore Sprinkler Suction Booster** • Option 1 – Deleting large bore suction booster for the sprinkler system (based on on-site water storage capable of providing 120% flow of water for the sprinkler system and fire hydrant flow being fully serviced by the town's main), instead of providing a large bore suction booster under AS 2118.1-2017. • Option 2 – Providing large bore suction booster for the sprinkler system but the maximum vertical lift of the dry pipe for the large bore suction is approx. 4.6 m, instead of 3 m allowed under AS 2419.1-2021 (or 2.8 m allowed in relation to the FRNSW Position Statements).	E1P4 or E1P3
E1D4	**Non-Provision of Sprinklers within Main Switch Room** Non-provision of sprinklers within Main Switch Board room, instead of complying with AS 2118.1-2017.	E1P4
Spec 17	**Fire sprinkler systems** Location of the sprinkler alarm valves being located within the fire services pump room, in lieu of complying with BCA Specification 17.	E1P4

Any Performance Solution will be subject to consultation and approval by Fire and Rescue NSW as part of the Construction Certificate process.

1.2 Performance Solutions – Accessibility

The assessment of the design documentation has revealed that the following areas are required to be assessed against the relevant Performance Requirements of the BCA in accordance with Clause 18 of the Building and Development Certifiers Regulation 2020. The submission for a Construction Certificate will need to include verification from a Accredited Access Consultant, where determined permissible under A2G1 of the BCA, for the following aspects:

DTS Clause	Description of Non-Compliance	Performance Requirement
	Please refer to the access consultant (Accessible Building Solutions)	

1.3 Performance Solutions Non-fire or Access Related

The assessment of the design documentation has revealed that the following areas are required to be assessed against the relevant Performance Requirements of the BCA in accordance with Clause 18 of the Building and Development Certifiers Regulation 2020. The submission for a Construction Certificate will need to include verification from a Accredited Consultant (suitably qualified in the relevant field), where determined permissible under A2G1 of the BCA, for the following aspects:

DTS Clause	Description of Non-Compliance	Performance Requirement
Part F	Where the façade is not designed to comply with F3 DtS Provisions, a weatherproofing performance solution report is required.	F1P2

1.4 Design Details Required

The assessment of the design documentation has revealed that the following areas require further details to demonstrate compliance with the prescriptive provisions of the BCA

DTS Clause	Description
BCA 2022	**Refer to Clause by Clause assessment in Appendix D.**
E1D5	**Sprinklers** The standard of performance shall also be confirmed by the fire service engineer.
E1D17	**Provision for special hazards** The building is proposed to have solar panels on the roof. This shall be document in the FEBQ as a hazard for FRNSW comment.
F1D5	**External Waterproofing membranes** Declared designs are to show water proofing details, hop designs, falls and drainage. Provide supporting manufactures technical details and specifications in accordance with AS4654.1 & 2

DTS Clause	Description
F2D2	**Wet area construction** Declared designs are to show water resistant and waterproofing details. Provide supporting manufactures technical details and specifications in accordance with Specification 26 and AS3740.
Spec 5	**Wall types** • Structural engineers supporting documentation to confirm the proposed FRL, specification and additional requirements. • Manufactures supporting documentation and test reports to confirm the proposed FRL's, thermal and acoustic properties.
Spec 12	**Fire Doors** Pyropanel timber-faced side-hung Fire doors has been approved to AS1530.4:2014. Please provide testing reports that align with the AS1905.1-2015 tested system. To be reviewed prior to issuance of Construction certificates.
AS1657 - 2013	**Access ladder** Detailed plans showing compliance with AS1657 to be provided.
Part J	**Energy efficiency** NatHERS accredited consultant stamp plans

The documentation will need further detailing such as door hardware, construction specifications, services design and manufacturer's details, as outlined in Appendix A of this report.

The application for Construction Certificate shall be assessed under the relevant provisions of the Environmental Planning and Assessment Act 1979 (As Amended) and the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.

2 Introduction

Modern Building Consultants (MBC Group) as the appointed BCA Consultant for the proposed development subject of this report by Richard Cole Architects. This report is based upon a desktop review of architectural details (as listed in Appendix A), presently in preliminary format, against the applicable provisions of the National Construction Code - Building Code of Australia Volume One 2022.

2.1 Purpose

The purpose of this report is to assess the current design proposal against the Deemed-to-Satisfy (DtS) provisions of the BCA.

2.2 Methodology

The methodology applied in undertaking this assessment has included: -

- A desktop review of architectural plans, as listed in Appendix A
- Detailed assessment of Sections C, D, E, F, G, H and J (as applicable / relevant) of the BCA
- Discussions with the design development team to gain an understanding of the development proposed.

2.3 Limitations

This report does not include or imply any detailed assessment for design, compliance or upgrading for:

- the structural adequacy or design of the building;
- the inherent derived fire-resistance ratings of any proposed structural elements of the building (unless specifically referred to); and
- the design basis and/or operating capabilities of any proposed:
    - electrical
    - mechanical
    - hydraulic
    - fire protection services.

This report does not include, or imply compliance with:

- the National Construction Code – Plumbing Code of Australia Volume 3
- the Disability Discrimination Act 1992 including the Disability ((Access to Premises – Buildings) Standards 2010 – unless specifically referred to)
- The deemed to satisfy provisions of Part D4 and F4D5 of BCA 2022
- The deemed to satisfy provisions of Section J of BCA 2022
- Demolition Standards not referred to by the BCA;
- Work Healthy and Safety Act 2011;
- An out of cycle change to the Building Code of Australia.
- Requirements of other Regulatory Authorities including, but not limited to, Telstra, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Roads and Transport Authority, Local Council, ARTC, Department of Planning and the like; and

- Conditions of Development Consent issued by the Local Consent Authority

This report has been prepared by MBC in the capacity as the appointed Certifier for the proposed development. This report is an assessment of the proposed development against the DtS provisions of the applicable BCA.

2.4 Current Legislation

The applicable legislation governing the design of buildings in NSW is the Environmental Planning and Assessment Act 1979.

Applicable Building Code of Australia (BCA)

The proposed development will be subject to compliance with the relevant requirements of the BCA as in force at the time that the application for the Construction Certificate is made.

In this regard it is assumed that the Construction Certificate application will be made prior to the 1st March 2025, as such this report is based upon the Deemed-to-Satisfy provisions of BCA 2022.

Should the application for Construction Certificate be made after 1st March 2025, this report will be required to be updated to reflect any changes made and now required by the BCA.

Should an out of cycle change occur to the Building Code of Australia, then this report is required to be updated to reflect any applicable changes made and now required by the BCA.

3 Development Description & Assessment Information

3.1 Proposed Development

The proposed mixed-use development comprises residential apartments, retail units and associated carparking.

The proposed development includes:
- 5 Residential apartments
- 3 Retails units
- Carparking

3.2 Location and Description

The site is located at 231 Whale Beach Road, Whale Beach. Refer to figure 1 below.

Figure 1 - 231 Whale Beach Rd, Whale Beach

3.3 BCA Classification (Part A6)

The proposed development shall contain the following classifications: -
- Class 2: being an apartment building
- Class 6: being a retail building or part
- Class 7a: being a carpark building or part

3.4 Rise in Storeys (Clause C2D3)

The proposed development has been assessed to have a rise in storeys of **Five (5).** The basement is not included in the rise in storeys.

3.5 Effective Height (Part A1)

The proposed development has been assessed to have an effective height of **13,800m,** this is measured from Ground floor level (RL 9,500) to level four (RL23,300).

Please note the definition of effective height of a building was changed 1 May 2016. The BCA now defines effective height as: -

"Effective height means the vertical distance between the floor of the lowest storey included in a determination 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)."

3.6 Type of Construction Required (Clause C2D2 / Table C2D2)

The proposed development is required to be **Type A** Construction. Specification 5 outlines the fire resistance required by certain building elements. This has also been provided in Appendix B.

3.7 Floor Area and Volume Limitations (Clause C3D3 / Table C3D3)

The development is limited to the following floor area and volume compartment limitations:

Class		Type A	Type B	Type C
5, 9b or 9c	Max floor area -	8,000m^2	5,500m^2	3,000m^2
	Max volume -	48,000m^3	33,000m^3	18,000m^3
6, 7, 8 or 9a	Max floor area -	5,000m^2	3,500m^2	2,000m^2
	Max volume -	30,000m^3	21,000m^3	12,000m^3

3.8 Building Data Summary

Part of Development	Use	Class	Floor Area (approx.) m^2	Population (using D2D18)
Basement	Car Park	7a	517	16
Ground floor	Ancillary areas Retail 1	6 6	415 188	170 Patrons & 18 Staff (proposed)
Level 1	Residential	2	299	NA
Level 2	Residential	2	349	NA
Level 3	Retail 2 Retail 3 Residential	6 6 2	63 27 246	19 Patrons & 2 Staff 8 Patrons & 1 Staff N/A
Level 4	Residential	2	240	NA

Notes:

- The above populations have been based on the floor areas and calculations in accordance with Table D2D18 of the BCA.
- *Retail tenancy 1 & 2 are anticipated to be a café/ restaurant. Therefore, a 1m2 per person calculation has been undertaken in accordance with Table D2D18 of the BCA.
- *Retail tenancy 2 & 3 are not considered as food and drink premises. These are considered a "shop" and a 3m2 per person calculation has been utilised.
- The floor areas have been adjusted to account for ancillary areas such as sanitary facilities, corridors, shelving and / or racking layouts in storage areas.
- The Carpark & 'ancillary areas' to the apartment have been considered ancillary to the main use for the purposes of population numbers

Summary of Construction and Building	
Use(s)	Residential, retail and carpark.
Classifications(s)	2, 6, 7a
Number of Storeys contained	6
Rise in Storeys	5
Type of Construction	A
Effective Height	13,800m

4 Proposed Fire Safety Schedule

The following is a draft Fire Safety Schedule for the proposed building, listing the likely measures and standards of performance required, this schedule shall be subject of further development and review as part of the Performance Solutions assessment:

Fire Safety Schedule
Section 78 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021

Address: 321 Whale Beach Road, Whale Beach 2107

The following essential fire safety measures shall be implemented in the whole of the building premises and each of the fire safety measures must satisfy the standard of performance listed in the schedule which, for the purposes of Section 78 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, is deemed to be the current fire safety schedule for the building.

SCHEDULE – Base Building BCA Year 2022
Type of Construction A
Effective height = 13,800m

	Measure	**Existing Performance Standard**
1.	Access panels, doors and hoppers to fire-resisting shafts	BCA 2022 Clause C4D14, AS 1905.1-2015, AS1905.2-2005 & Manufacturer's specifications
2.	Self-closing, automatic closing and latching mechanisms	BCA 2022 Clause C4D5, C4D6, C4D9, C4D12, Spec 12
3.	Automatic fail safe devices	BCA 2022 Clause, D3D24, D3D26, D3D27, Spec 12, AS 2118.1-2017, AS 1670.1-2018
4.	Automatic fire detection and alarm system	BCA 2022 Clause E2D3, E2D8, E2D9, Spec 20 Clause S20C4, S20C7 AS1670.1-2015
5.	Automatic fire suppression system	BCA 2022 Clause E1D4, Spec 17, Spec 18 AS 2118.1-2017
6.	Emergency lift	BCA 2022 Clause E3D5, AS 1735.1-2016 AS 1735.2-2001, AS1735.11-1986, AS1735.12 1999
7.	Emergency lighting	BCA 2022 Clause E4D2, E4D3 E4D4, AS 2293.1-2018
8.	Exit and directional signage	BCA 2022 Clause E4D5, NSW E4D6 & E4D8, Spec 25 AS 2293.1-2018
9.	Emergency warning and intercommunication systems	BCA 2022 Clause E4D9, S31C19, AS 1670.4-2018

	Measure	Existing Performance Standard
10.	Fire alarm monitoring system	BCA 2022 Spec 20 Clause S20C8, AS 1670.3-2018
11.	Fire & Smoke dampers	BCA 2022 Clause E2D3, C3D6, C4D13, C4D15, Spec 11, Spec 19 AS/NZS 1668.1-2015, AS 1682.1-2015, AS 1682.2-2015, Manufacturer's specifications
12.	Fire doors	BCA 2022 Clause C3D13, C3D14, C4D5, C4D7, C4D9, C4D12, S5C45, Spec 12, AS 1905.1-2015
13.	Fire hose reel systems	BCA 2022 Clause E1D3, AS 2441-2005
14.	Fire hydrant systems	BCA 2022 Clause E1D2, AS 2419.1-2021
15.	Fire seals (protecting openings and service penetrations in fire resisting components of the building)	BCA 2022 Clause C4D15, Spec 13, AS 4072.1-2005, AS 1530.4-2014, Manufacturer's specifications
16.	Lightweight construction	BCA 2022 Clause C2D9, Spec 6, AS 1530.4-2014, Manufacturer's specifications
17.	Mechanical air handling systems	BCA 2022 E2 and NSW Part E2, Spec 19, Spec 21, Spec 22, Spec 24. AS/NZS 1668.1-2015, AS 1668.2-2012
18.	Openings in fire-isolated lift shafts	BCA 2022 Clause C3D11 AS 1735.11-1986
19.	Occupant warning system	BCA 2022 Clause E2D3, S17C8, Spec 20 Clause S20C7, AS 1670.1-2018
20.	Path of travel for stairways, passageway and ramps	Section 107-109 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021
21.	Portable fire extinguishers	BCA 2022 Clause E1D14, AS 2444-2001
22.	Wall wetting sprinkler and drencher systems	BCA 2022 Clause C4D5, Spec 31, AS 2118.2-2021
23.	Warning and operational signs	BCA 2022 Clause C4D7, D3D28, E3D4, Spec 31, Section 108 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021
24.	Add in performance solution requirement e.g. Storage of XXXX materials on storey XXXX must be less than XXXX above finished floor level	Performance Solution Report XXXXX, prepared by XXXX dated XXXX

5 BCA Assessment – Clause by Clause

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
Section B - Structure				
Part B1 - Structural Provisions				
B1D1	Deemed-to-Satisfy Provisions	Compliance Readily Achievable	Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements B1P1 to B1P4 are satisfied by complying with B1D2 to B1D6. Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable	**Structural design to be addressed by a qualified Structural Engineer. Drawings and Design Statement to be provided.**
B1D2	Resistance to actions	Compliance Readily Achievable	The resistance of a building or structure must be greater than the most critical action effect resulting from different combinations of actions, where— (a) the most critical action effect on a building or structure is determined in accordance with B1D3 and the general design procedures contained in AS/NZS 1170.0; and (b) the resistance of a building or structure is determined in accordance with B1D4. Where new structural works do not comply with the deemed to satisfy provisions, a performance solution demonstrating compliance with B1P1 and B1P2 can be adopted. This can be achieved through verification method B1V1.	**Structural design to be addressed by a qualified Structural Engineer. Drawings and Design Statement to be provided.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
B1D3	Determination of individual actions	Compliance Readily Achievable	Determination of buildings structural individual actions and importance level are to be in accordance with NCC B1D3.	**Structural design to be addressed by a qualified Structural Engineer. Drawings and Design Statement to be provided.**
B1D4	Determination of structural resistance of materials and forms of construction	Compliance Readily Achievable	Structural documentation demonstrating that materials and forms of construction will comply with B1D2,B1D3, B1D4 of the NCC and referenced Australian Standards will be required by a suitably qualified engineer. The structural engineer is to nominate any deviations from B1D2, B1D3, B1D4 or Australian Standards applicable to these works. Structural engineer to confirm that the prescribed FRL has been achieved in accordance with Specification 5 of the NCC for all structural components. This is to be nominated on the plans submitted for review and approval.	**Structural design to be addressed by a qualified Structural Engineer. Drawings and Design Statement to be provided.**
Section C - Fire resistance				
Part C2 - Fire resistance and stability				

<table>
<tr><th>BCA Clause</th><th>Compliance Provisions</th><th>Status</th><th>MBC Assessment Report Commentary</th><th>MBC Notes for Inspection</th></tr>
<tr><td>C2D1</td><td>Deemed-to-Satisfy Provisions</td><td>Compliance Readily Achievable</td><td>Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with—

(a) C2D2 to C2D15, C3D2 to C3D15 and C4D2 to C4D17; and
(b) in a building containing an atrium, Part G3; and
(c) for additional requirements for Class 9b buildings, Part I1; and
(d) for farm sheds, Part I3.

Where a Performance Solution is proposed, the relevant performance requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.</td><td></td></tr>
<tr><td>C2D2</td><td>Type of construction required</td><td>Compliance Readily Achievable</td><td>The building is required to be constructed in accordance with Type A construction.

Table C2D2: Type of construction required
<table><tr><th>Rise in storeys</th><th>Class of building 2, 3, 9</th><th>Class of building 5, 6, 7, 8</th></tr><tr><td>4 or more</td><td>A</td><td>A</td></tr><tr><td>3</td><td>A</td><td>B</td></tr><tr><td>2</td><td>B</td><td>C</td></tr><tr><td>1</td><td>C</td><td>C</td></tr></table></td><td>Type A construction.</td></tr>
<tr><td>C2D3</td><td>Calculation of Rise in storeys</td><td>Noted</td><td>The rise in storeys is the sum of the greatest number of storeys at any part of the external walls of the building and any storeys within the roof space—

(a) above the finished ground next to that part; or
(b) if part of the external wall is on the boundary of the allotment, above the natural ground level at the relevant part of the boundary.</td><td>The building is noted to have a rise in storeys of 5. GF, Level 1 - Level 4</td></tr>
</table>

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
C2D4	Buildings of Multiple classification	Compliance Readily Achievable	In a building of multiple classifications, the Type of construction required for the building is the most fire-resisting Type resulting from the application of Table C2D2 on the basis that the classification applying to the top storey applies to all Stories.	
C2D5	Mixed types of construction	Compliance Readily Achievable	A building may be of mixed Types of construction where it is separated in accordance with C3D8 and the Type of construction is determined in accordance with C2D2 or C2D4	
C2D10	Non-combustible building elements	Compliance Readily Achievable	In a building required to be of Type A construction, the following building elements and their components must be non-combustible: (a) External walls and common walls, including all components incorporated in them including the facade 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. A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible construction in a Type A building. A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shafts, must comply with Specification 5.	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
C2D11	Fire Hazard Properties	Compliance Readily Achievable	The fire hazard properties of walls, ceilings, floor coverings and mechanical ductwork will need to comply with Specification 7 of the NCC.	**PCA to review prior to issuance of the Construction Certificate.**
C2D14	Ancillary elements	Compliance Readily Achievable	An ancillary element must not be fixed, installed, attached to or supported by the internal space within or external face of an external wall that is required to be non-combustible unless it is one of the following • An ancillary element that is non-combustible. • A gutter, downpipe or other plumbing fixture or fitting. • A flashing. • A grate or grille not more than 2 m^2 in area associated with a building service. • An electrical switch, socket-outlet, cover plate or the like. • A light fitting. • A required sign. • A sign other than one provided under (a) or (g) that— i) achieves a group number of 1 or 2; and ii) does not extend beyond one storey; and iii) does not extend beyond one fire compartment; and iv) is separated vertically from other signs permitted under (h) by at least 2 storeys. v) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that— i) meets the relevant requirements of S7C7 as for an internal element; and ii) serves a storey— at ground level; or (A) immediately above a storey at ground level; and (B) does not serve an exit, where it would render the exit unusable in a fire. • A part of a security, intercom or announcement system.	**All external wall materials and attachments are required to be non-combustible. A schedule of external wall materials and attachments must be provided for review by the PCA with the Construction Certificate Application.**

<table>
<tr><th>BCA Clause</th><th>Compliance Provisions</th><th>Status</th><th>MBC Assessment Report Commentary</th><th>MBC Notes for Inspection</th></tr>
<tr><td></td><td></td><td></td><td>• Wiring
• Waterproofing material applied to the floor surface of external balconies, terraces or the like, and a 250 mm upturn above the floor level
• A gasket, caulking, sealant or adhesive.
Test reports demonstrating compliance with AS 1530.1 will be required for the external wall elements and attachments will be required as the design develops.</td><td></td></tr>
<tr><td colspan="5">Part C3 - Compartmentation and Separation</td></tr>
<tr><td>C3D1</td><td>Deemed-to-Satisfy Provisions</td><td>Noted</td><td>Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with—
(a) C2D2 to C2D14, C3D2 to C3D15 and C4D2 to C4D17; and
(b) in a building containing an atrium, Part G3; and
(c) or additional requirements for Class 9b buildings, Part I1; and
(d) for farm sheds, Part I3.
(2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable</td><td></td></tr>
<tr><td>C3D2</td><td>Application of Part</td><td>Noted</td><td>This part is applicable</td><td></td></tr>
<tr><td>C3D3</td><td>General Floor area and volume limitations</td><td>Compliance Appears Achieved</td><td>Floor area and volume limitations comply with Type A B C Construction.
<table>
<tr><th colspan="2" rowspan="2">Classification</th><th colspan="3">Type of Construction</th></tr>
<tr><th>A</th><th>B</th><th>C</th></tr>
<tr><td rowspan="2">5, 9b or 9c aged care building</td><td>max floor area—</td><td>8 000 m²</td><td>5 500 m²</td><td>3 000 m²</td></tr>
<tr><td>max volume—</td><td>48 000 m³</td><td>33 000 m³</td><td>18 000 m³</td></tr>
<tr><td rowspan="2">6, 7, 8 or 9a (except for patient care areas)</td><td>max floor area—</td><td>5 000 m²</td><td>3 500 m²</td><td>2 000 m²</td></tr>
<tr><td>max volume—</td><td>30 000 m³</td><td>21 000 m³</td><td>12 000 m³</td></tr>
</table></td><td>Compliance is achieved.</td></tr>
</table>

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
C3D8	Separation in fire walls	Compliance Readily Achievable	Where fire walls are required, the fire walls between each fire compartment must be constructed in accordance with C3D8 and specification 5. (a) The fire wall has the relevant FRL prescribed by Specification 5 for each of the adjoining parts, and if these are different, the greater FRL, except where S5C18(c), S5C21(3) and S5C24(3) permit a lower FRL on the carpark side (b) Any openings in a fire wall must not reduce the FRL required by Specification 5 for the fire wall, except where permitted by the Deemed-to-Satisfy Provisions of Part C4 (c) Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not pass through or cross the fire wall unless the required fire-resisting performance of the fire wall is maintained. Separation of buildings A part of a building separated from the remainder of the building by a fire wall may be treated as a separate building for the purposes of the Deemed-to-Satisfy Provisions of Sections C, D and E if it is constructed in accordance with C3D8.	**Separation by way of fire walls is not proposed in accordance with this clause. SOU's are separated in accordance with Specification 5 for bounding construction.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
C3D9	Separation of classifications in the same storey	Compliance Readily Achievable	If a building has parts of different classifications located alongside one another in the same storey— (a) each building element in that storey must have the higher FRL prescribed in Specification 5 for that element for the classifications concerned; or (b) the parts must be separated in that storey by a firewall	**The class 6 is proposed to be fire separated from the class 2 on level 3 by way of 180minute fire walls.**
C3D10	Separation of classifications in different storeys	Compliance Readily Achievable	If parts of different classification are situated one above the other in adjoining storeys they must be separated as follows: (a) Type A construction — The floor between the adjoining parts must have an FRL of not less than that prescribed in Specification 5 for the classification of the lower storey. (b) Type B or C construction — If one of the adjoining parts is of Class 2, 3 or 4, the floor separating the part from the storey below must— (i) be a floor/ceiling system incorporating a ceiling which has a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or (ii) have an FRL of at least 30/30/30; or (iii) have a fire-protective covering on the underside of the floor, including beams incorporated in it, if the floor is combustible or of metal.	-

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
C3D11	Separation of Lift Shafts	Compliance Readily Achievable	Any lift connecting more than 2 storeys, or more than 3 storeys if the building is sprinklered, (other than lifts which are wholly within an atrium) must be separated from the remainder of the building by enclosure in a shaft in which— (a) in a building required to be of Type A construction — the walls have the relevant FRL prescribed by Specification5; and (b) in a building required to be of Type B construction — the walls— (i) if loadbearing, have the relevant FRL prescribed by Tables S5C21a to S5C21f of Specification 5; or (ii) if non-loadbearing, be of non-combustible construction. Openings for lift landing doors and services must be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4.	**Lift Shafts are proposed to be fire separated with an FRL of 180/120/120**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
C3D13	Separation of equipment	Compliance Readily Achievable	The following equipment is required to be fire separated from the remainder of the building with construction achieving an FRL of 120 minutes: § lift motors and lift control panels; or § emergency generators used to sustain emergency equipment operating in the emergency mode; or § central smoke control plant; or § boilers; or § a battery system installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more. Separating construction must have— (i) an FRL as required by Specification 5, but not less than 120/120/120; and (ii) any doorway protected with a self-closing fire door having an FRL of not less than –/120/30; or (iii) when separating a lift shaft and lift motor room, an FRL not less than 120/–/–.	
C3D14	Electricity supply system	Compliance Readily Achievable	An electricity substation located within a building must— (a) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and (b) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30. A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must—	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
			(a) be separated from any other part of the building by construction having an FRL of not less than120/120/120; and (b) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30. Where emergency equipment is required in a building, all switchboards in the electrical installation, which sustain the electricity supply to the 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 a fault from the non-emergency equipment switchgear. Emergency equipment includes but is not limited to the following: - Fire hydrant booster pumps. - Pumps for automatic sprinkler systems, water spray, chemical fluid suppression systems or the like. - Pumps for fire hose reels where such pumps and fire hose reels form the sole means of fire protection in the building. - Air handling systems designed to exhaust and control the spread of fire and smoke. - Emergency lifts. - Control and indicating equipment. - Emergency warning and intercom systems.	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
C3D15	Public Corridors in Class 2 and 3 Buildings	Compliance Readily Achievable	Public corridors are proposed to be less than 40m in length	**Public corridors are proposed to be less than 40m in length**
Part C4 - Protection of Openings				
C4D2	Application of Part	Further Details Required	This part is applicable	
C4D3	Protection of openings in external walls	Compliance Readily Achievable	Openings in an external wall that is required to have an FRL must be protected in accordance with C4D5, and if wall-wetting sprinklers are used they must be located externally. The requirements of above only apply if the distance between the opening and the fire-source feature to which it is exposed is less than— (a) 3 m from a side or rear boundary of the allotment; or (b) 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or (c) 6 m from another building on the allotment that is not Class 10	**Openings are greater than 3m to all boundaries.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
C4D4	Separation of openings in external walls and associated openings in different fire compartments	Compliance Readily Achievable	The distance between parts of external walls and any openings within them in different fire compartments separated by a fire wall must not be less than that set out in Table C4D4, unless— (a) those parts of each wall have an FRL not less than 60/60/60; and (b) any openings protected in accordance with C4D5 Distances in the table include: 6m for opposite walls, 4m for walls at 90 degrees, Nil for walls at 180 degrees.	**No openings are exposed to each other.**
C4D5	Acceptable methods of protection	Performance Solution Proposed	Where protection is required, doorways, windows and other openings must be protected as follows: Doorways— (i) internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or (ii) –/60/30 fire doors that are self-closing or automatic closing. Windows— (i) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or (ii) –/60/– fire windows that are automatic closing or permanently fixed in the closed position; or (iii) –/60/– automatic closing fire shutters Fire doors, fire windows and fire shutters must comply with Specification 12	**Refer to D2D12 for discharge of fire stairs. Protection of ground floor entrance glazing is required.**
C4D9	Openings in fire-isolated exits	Compliance Readily Achievable	Doorways in fire-isolated exits must be protected by --/60/30 fire doors which are self-closing or automatic closing (detection activation).	-

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
C4D10	Service penetrations in fire-isolated exits	Compliance Readily Achievable	Fire-isolated exits must not be penetrated by any services other than— electrical wiring permitted by D3D8(6) to be installed within the exit; or (a) ducting associated with a pressurisation system if it— (b) is constructed of material having an FRL of not less than –/120/60 where it passes through any other part (i) of the building; and does not open into any other part of the building; or (ii) for fire services, water supply and test drain pipes.	**A schedule of penetration locations and protection methods must be provided for review by the PCA with the Construction Certificate Application.**
C4D11	Openings in fire-isolated lift shafts	Compliance Readily Achievable	Doors to lifts must be protected by --/60/-- fire doors which comply with AS 1735.11 and are set to remain closed except when discharging/receiving passengers. Life indicator panels must be backed by construction having an FRL of not less than --/60/-- if it exceeds 35,000mm2, i.e. 175mm x 200mm.	**Lifts shaft doors shall be fire rated in accordance with this clause. This shall accompany the application for a Construction Certificate.**
C4D12	Bounding construction: Class 2 and 3 buildings and Class 4 parts	Further Details Required	The building contains Class 2, 3 or 4 classifications	**All lobbies/ hallways and doors are proposed to be fire separated. A finalised set of compartmentation plans are required in addition to a doors schedule. This shall be provided for review by the PCA with the Construction Certificate Application.**
C4D13	Openings in floors and ceilings for services	Further Details Required	Service riser shafts must be constructed in accordance with Spec 5.	**A finalised set of compartmentation plans are required in addition to a doors schedule.**
C4D14	Openings in shafts	Further Details Required	Openings in shafts are required to be protected by a self-closing --/60/30 fire door or hooper or an access panel having an FRL of --/60/30.	**A finalised set of compartmentation plans are required in addition to a doors schedule. A schedule of fire**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
				doors/ hoppers. This shall be provided for review by the PCA with the Construction Certificate Application.
C4D15	Openings for service installations	Further Details Required	Any new proposed penetrations must comply with provisions of C4D15 and Spec. 13 At OC stage a detailed schedule of every penetration is required to be produced. Advise engaging specialist fire stopping company.	**Detailed schedule of every penetration is required to be produced for OC. Advise engaging specialist fire stopping company.**
C4D16	Construction joints	Compliance Readily Achievable	Any proposed joint construction is to comply with the provisions of C4D16 and in accordance to AS 1530.4	**Test report verifying materials used in construction joints is required. This shall be provided for review by the PCA with the Construction Certificate Application.**
C4D17	Columns protected with lightweight construction to achieve an FRL	Compliance Readily Achievable	Any lightweight construction must be with a method and materials identical with a tested prototype which has achieved the required FRL. Details to be submitting demonstrating compliance prior to CC.	**None proposed at this stage**
Specification				

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
Specification 5	Fire-Resisting Construction	Further Details Required	Refer to specification - 5	**• Structural engineers supporting documentation to confirm the proposed FRL, specification and additional requirements.** **• Manufactures supporting documentation and test reports to confirm the proposed FRL's thermal and acoustic properties. This shall be provided for review by the PCA with the Construction Certificate Application.**
Specification 6	Structural Tests for Lightweight Construction	Compliance Readily Achievable	Refer to specification	
Specification 7	Fire Hazard Properties	Compliance Readily Achievable	Refer to specification	
Specification 12	Fire Doors, Smoke Doors, Fire Windows and Shutters	Compliance Readily Achievable	Refer to specification	**Pyropanel timber-faced side-hung Fire doors have been approved to AS1530.4:2014. Please provide testing reports that align with the AS1905.1-2015 tested system. This shall be provided for review by the PCA with the Construction Certificate Application.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
Specification 13	Penetration of Walls, Floors and Ceilings by Services	Compliance Readily Achievable	Refer to specification	**A schedule of penetrations and protection methods is required.**
Section D - Access and Egress				
Part D2 - Provision for Escape				
D2D1	Deemed-to-Satisfy Provisions	Noted	Noted	
D2D2	Application of Part	Noted	The Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 or 3 building or a Class 4 part of a building.	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D2D3	Number of exits required	Compliance Readily Achievable	All buildings — Every building must have at least one exit from each storey. Class 2 to 8 buildings — In addition to any horizontal exit, not less than 2 exits must be provided from the following: (a) In addition to any horizontal exit, not less than 2 exits must be provided from the following: (i) Each storey if the building has an effective height of more than 25 m. (ii) A Class 2 or 3 building subject to C2D6. Basements — In addition to any horizontal exit, not less than 2 exits must be provided from any storey if egress from that storey involves a vertical rise within the building of more than 1.5 m, unless— (a) the floor area of the storey is not more than 50 m^2; and (b) the distance of travel from any point on the floor to a single exit is not more than 20 m. (4) Class 9 buildings — In addition to any horizontal exit, not less than 2 exits must be provided from the following: (i) Each storey if the building has a rise in storeys of more than 6 or an effective height of more than 25 m. (ii) Any storey which includes a patient care area in a Class 9a health-care building. (iii) Any storey that contains sleeping areas in a Class 9c building. (iv) Each storey, or each part of a storey, used as in a Class 9b building used as an early childhood centre. (v)Each storey in a primary or secondary school with a rise in storeys of 2 or more.	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
			(vi) Any storey or mezzanine that accommodates more than 50 persons, calculated under D2D18. (b) The requirements of (a) do not apply to a part of a storey that— (i) is a plant room, machinery room, storeroom, lift-machine room or the like; and (ii) is provided with direct egress to a road or open space; and satisfies D2D5 by the provision of 1 exit. Additional exits are required for Class 9b and Class 9c buildings, at least one exit from every part of a storey which has been divided into fire compartments in accordance with C3D3 or C3D6 (6) Exits in open spectator stands — In an open spectator stand containing more than one tier of seating, every tier must have not less than 2 stairways or ramps, each forming part of the path of travel to not less than 2 exits. (7) Access to exits — Without passing through another sole-occupancy unit every occupant of a storey or part of a storey must have access to— an exit; or at least 2 exits if 2 or more exits are required.	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D2D4	When fire-isolated stairways and ramps are required	Compliance Appears Achieved	Class 2 or 3 All stairways serving as a required exit must be fire-isolated unless it passes through or by not more than (i) 3 consecutive storeys in a Class 2 building; or (ii) 2 consecutive storeys in a Class 3 building, and one extra storey of any classification may be included if: the building has a sprinkler system (other than a FPAA101D system) complying with Specification E1.5 installed throughout; or (ADD in based on design) Class 5, 6, 7, 8 or 9 buildings — Every stairway or ramp serving as a required exit must be fire-isolated	**Fire Stairs are proposed in accordance with this clause. Basement external stairway complies with this clause and is not required to be fire-isolated**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D2D5	Exit travel distances	Compliance Appears Achieved	Travel distance shall be as follows: **Class 5, 6, 7, 8 or 9 portions except 9a buildings:** - 20m to a point of choice - 40m total distance to an exit -30m to a single exit serving a storey at the level of egress to the road or open space for class 5 and 6 portions **Class 2 or 3 portions:** The doorway of an SOU (including class 4) must be 6m from a point of choice of 2 available exits. For Class 2 or 3 potions 20m a single exit serving the level of egress to a road or open space. No point on the floor of a room not within an SOU must be more than 20m from an exit or a point in which two exits are available in different directions.	**Compliance is achieved.**
D2D6	Distance between alternative exits	Compliance Appears Achieved	Exits must not be less than 9m apart; and note more than: Class 2 or 3 - 45m apart Class 5, 6, 7, 8 or 9 - 60m apart; and Located so that alternative paths of travel do not converge such that they become less than 6 m apart.	**Compliance is achieved.**
D2D7	Height of doorways in exits and paths	Compliance Readily Achievable	In a required exit or path of travel to an exit the unobstructed height throughout must be not less than 2	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
	of travel to exits		m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm.	
D2D8 & NSW D2D9	Width of exits and paths of travel to exits	Compliance Appears Achieved	The unobstructed width of each required exit or path of travel to an exit, except for ladders provided in accordance with D2D21, D3D23 or I3D5, and doorways, must be not less than 1m	**Compliance is achieved.**
D2D9	Width doorways in exits or path of travel to exits	Compliance Readily Achievable	Doorways are proposed to comply with this clause.	**Compliance is achieved.**
D2D10	Exit width not to diminish in direction of travel	Compliance Readily Achievable	Exits width is not to diminish in the direction of travel	**Compliance is achieved.**
D2D11	Determination and measurement of exits and paths of travel to exits	Noted		

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D2D12	Travel via fire-isolated exits	Performance Solution Proposed	A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated unless it is from— (i) a public corridor, public lobby or the like; or (ii) a sole-occupancy unit occupying all of a storey; or (iii) a sanitary compartment, airlock or the like. Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly or by way of its own fire-isolated passageway: i) to a road or open space; or ii) to a point— (A) in a storey or space, within the confines of the building, that is used only for pedestrian movement, car parking or the like and is open for at least 2/3 of its perimeter; and (B) from which an unimpeded path of travel, not further than 20 m, is available to a road or open space; or iii) into a covered area that— (A) adjoins a road or open space; and (B) is open for at least 1/3 of its perimeter; and (C) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and (D) provides an unimpeded path of travel from the point	**The path of travel from the proposed fire isolated stair at level 3 discharges within 6m from the lift lobby entrance. Entrance door and surrounding areas to achieve a FRL of 60/60/60 for DtS, provide a performance solution to negate the FRL requirement.** **A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated.** **Fire sprinkler & pump room to be provided with an air lock or smoke lobby in lieu of direct entrance into a fire isolated stair.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
			of discharge to the road or open space of not more Where a path of travel from a fire-isolated exit necessitates passing within 6 m of any part of an external wall of the same building, measured, that part of the wall must have— (i) an FRL of not less than 60/60/60; and (ii) any openings protected internally in accordance with C3.4, for a distance of 3 m above, the level of the path of travel.	
D2D14	Travel by non-fire-isolated stairways or ramps	Compliance Readily Achievable	A non-fire isolated stairways serving as a required exit must provide a continuous means of travel by its own flights and landings from every storey served to the level at which egress to a road or open space is provided.	**The basement external stair complies with this clause.**
D2D15	Discharge from exits	Compliance Readily Achievable	An exit must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit, or access to it. Id the required exit leads to open space, the required width of the path of travel to the road must be maintained (the minimum width of the required exit or 1m whichever is the greater) If the exit discharges at a different level to the road a compliant ramp must be provided. Class 9a building requires a compliant stair. Discharge points must be as far apart as practical.	**Compliance achieved.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D2D18	Number of persons accommodated	Noted	For the purposes of the Deemed-to-Satisfy Provisions, the number of persons accommodated in a storey, room or mezzanine must be determined with consideration to the purpose for which it is used and the layout of the floor area by— (a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square meters per person listed in Table D2D18 according to the use of that part, excluding spaces set aside for— (i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and (ii) service ducts and the like, sanitary compartments or other ancillary uses; or (b) reference to the seating capacity in an assembly building or room; or (c)any other suitable means of assessing its capacity. Table D2D18 Area per person according to use	**Refer to BCA Report Appendix.**
D2D19	Measurement of distances	Noted	The nearest part of an exit means in the case of— (a) a fire-isolated stairway, fire-isolated passageway, or fire-isolated ramp, the nearest part of the doorway providing access to them; and (b) a non-fire-isolated stairway, the nearest part of the nearest riser; and (c) a non-fire-isolated ramp, the nearest part of the junction of the floor of the ramp and the floor of the storey; and (d) a doorway opening to a road or open space, the	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
			nearest part of the doorway; and (e) a horizontal exit, the nearest part of the doorway.	
D2D20	Method of measurement	Noted	The following rules apply: In the case of a room that is not a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building, (a) the distance includes the straight-line measurement from any point on the floor of the room to the nearest part of a doorway leading from it, together with the distance from that part of the doorway to the single required exit or point from which travel in different directions to 2 required exits is available. (b) Subject to (d), the distance from the doorway of a sole-occupancy unit in a Class 2 or 3 building or a Class 4 part of a building is measured in a straight line to the nearest part of the required single exit or point from which travel in different directions to 2 required exits is available. (c) Subject to (d), the distance between exits is measured in a straight line between the nearest parts of those exits. (d) Only the shortest distance is taken along a corridor, hallway, external balcony or other path of travel that curves (e) If more than one corridor, hallway, or other internal path of travel connects required exits, for the purposes of D2D6(c) the measurement is along the path of travel through the point at which travel in different directions to those exits is available, as determined in accordance with D2D5. (f) If a wall (including a demountable internal wall) that does not bound a room, corridor, hallway or the like	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
			causes a change of direction in proceeding to a required exit, the distance is measured along the path of travel past that wall (g) If permanent fixed seating is provided, the distance is measured along the path of travel between the rows of seats. (h) In the case of a non-fire-isolated stairway or non-fire-isolated ramp, the distance is measured along a line connecting the nosings of the treads, or along the slope of the ramp, together with the distance connecting those lines across any intermediate landings.	
Part D3 - Construction of Exits				
D3D3	Fire-isolated stairways and ramps	Compliance Readily Achievable	Fire-isolated stairs must be: (a) of *non-combustible* materials; and (b) so that if there is local failure it will not cause structural damage to, or impair the fire-resistance of, the shaft.	**Compliance readily achievable**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D3D4	Non-fire-isolated stairways and ramps	Compliance Readily Achievable	In a building having a rise in storeys of more than 2, required stairs and ramps (including landings and any supporting building elements) which are not required to be within a fire-resisting shaft, must be constructed according to D3D3, or only of— (c) reinforced or prestressed concrete; or (d) steel in no part less than 6 mm thick; or (e) (c) timber that— (i) has a finished thickness of not less than 44 mm; and has an average density of not less than 800 kg/m3 (ii) at a moisture content of 12%; and (iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.	**Compliance readily achievable**
D3D8	Installations in exits and paths of travel	Compliance Readily Achievable	Services or equipment comprising— (i) electricity meters, distribution boards or ducts; or (ii) central telecommunications distribution boards or equipment; or (iii) electrical motors or other motors serving equipment in the building, may be installed in— (iv) a required exit, except for fire-isolated exits specified in (a); or (v) in any corridor, hallway, lobby or the like leading to a required exit, if the services or equipment are enclosed by non-combustible construction or a fire protective covering	**EDB and Comms rooms to include non-combustible doors and smoke seals as per D3D8 of the BCA. Details to be provided for review by the PCA with the Construction Certificate Application.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
			with doorways or openings suitably sealed against smoke spreading from the enclosure.	
D3D10	Width of required stairways and ramps	Noted	A required stairway or ramp that exceeds 2 m in width is counted as having a width of only 2 m unless it is divided by a handrail or barrier continuous between landings and each division has a width of not more than 2 m.	
D3D14	Goings and risers	Compliance Readily Achievable	Risers and goings must comply with D3D14 and have slip resistance as per table D3D15. Detailed drawings will be required as the design develops. Architect to cover in Design Compliance Statement.	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D3D15	Landings	Compliance Readily Achievable	In a stairway— (a) landings having a maximum gradient of 1:50 may be used in any building to limit the number of risers in each flight and each landing must— (i) be not less than 750 mm long, and where this involves a change in direction, the length is measured 500 mm from the inside edge of the landing; and (ii) have— - a surface with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; or - a strip at the edge of the landing with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586, where the edge leads to a flight below Landings have been reviewed and appear compliant. Detailed drawings will be required as the design develops.	**Compliance readily achievable**
D3D17	Barriers to prevent falls	Compliance Readily Achievable	A Barrier to prevent falls is required where the surface below is greater than 1m. Balustrade design is required to be in accordance with D3D18, D3D19, D3D20. Detailed drawings of the balustrades will be required as the design develops.	-

<table>
<tr><th>BCA Clause</th><th>Compliance Provisions</th><th>Status</th><th>MBC Assessment Report Commentary</th><th>MBC Notes for Inspection</th></tr>
<tr><td>D3D18</td><td>Height of Barriers</td><td>Compliance Readily Achievable</td><td>The height of a barrier required by D3D17 must be not less than the following:

Table D3D14: Riser and going dimensions
<table><tr><th rowspan="2">Stairway location</th><th colspan="2">Riser (R)</th><th colspan="2">Going (G)Note 3</th><th colspan="2">Quantity (2R + G)</th></tr><tr><th>Max</th><th>Min</th><th>Max</th><th>Min</th><th>Max</th><th>Min</th></tr><tr><td>Public</td><td>190</td><td>115</td><td>355</td><td>250</td><td>700</td><td>550</td></tr></table>
(a) For stairways or ramps 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 in length — 865 mm

(c) In front of fixed seating on a mezzanine or balcony within an auditorium in a Class 9b building, where the horizontal projection extends not less than 1 m outwards from the top of the barrier — 700 mm.

(d) For all other locations — 1 m.</td><td></td></tr>
<tr><td>D3D19</td><td>Openings in barriers</td><td>Compliance Readily Achievable</td><td>Openings in a required barrier must not allow a 125 mm sphere to pass through.

The maximum 125 mm barrier opening for a stairway, such as a non fire-isolated stairway, is measured above the nosing line of the stair treads.

Where a barrier is fixed to the face of a landing, balcony, deck or the like, the opening between the barrier and the face must not permit a 40 mm sphere to pass through</td><td>-</td></tr>
</table>

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D3D20	Barrier climability	Compliance Readily Achievable	A barrier required by D3D17, located on a floor more than 4 m 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. A climbable element is considered a horizontal element or a protrusion of 20mm or more. Further review will be required as the design develops.	-

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D3D22	Handrails	Compliance Readily Achievable	Handrails must— (a) be located along at least one side of the ramp or flight; and (b) be located along each side if the total width of the stairway or ramp is 2 m or more; and (c) in a Class 9b building used as a primary school or early childhood centre— - (i) have one handrail fixed at a height of not less than 865 mm; and - (ii) have a second handrail fixed at a height between 665 mm and 750 mm; and (d) in any other case, be fixed at a height of not less than 865 mm; and (e) be continuous between stair flight landings and have no obstruction on or above them that will tend to break a hand-hold; and (f) in a required exit serving an area required to be accessible, be designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail required by (1)(c)(ii).	-

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D3D24	Doorways and doors	Compliance Readily Achievable	Doors serving as required exits or forming part of required exits must be swinging (in the direction of egress) or power operated. If fitted with a door which is power-operated— (i) it must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and (ii) if it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door	
D3D25	Swinging doors	Performance Solution Proposed	A swinging door in a required exit or forming part of a required exit must not encroach— (i) at any part of its swing by more than 500 mm on the required width (including any landings) of a required stairway, ramp or passageway if it is likely to impede the path of travel of the people already using the exit; and (ii) (ii) when fully open, by more than 100 mm on the required width of the required exit; and Must swing in the direction of egress unless— it serves a building or part with a floor area not more than 200 m2 it is the only required exit from the building or part and it is fitted with a device for holding it in the open position.	**Ground floor - surf Road** **Level 3 - Whale Beach Road** **The nominated exits door do not swing in the direction of egress**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
			Exit doors from classrooms leading to the balcony are to be nominated on the plans for review.	
D3D26	Operation of latch	Compliance Readily Achievable	A door in a required exit, forming part of a required exit or in the path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress, by— (a) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area required to be accessible by Part D4— - be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and - have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or (b) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor.	-

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
D3D28	Signs on doors	Compliance Readily Achievable	Signage to be provided on exit and fire door; for a self-closing door— “FIRE SAFETY DOOR DO NOT OBSTRUCT DO NOT KEEP OPEN”; or, for a door discharging from fire-isolated exit "FIRE SAFETY DOOR—DO NOT OBSTRUCT"	**Detailed signage schedule required confirming the proposed door, location, side of door. Details to be provided for review by the PCA with the Construction Certificate Application.**
D3D29	Protection of openable windows	Compliance Readily Achievable	A window opening must be provided with protection if the floor below the window is 2 m or more above the surface beneath in— (i) a bedroom in a Class 2 or 3 building or Class 4 part of a building; or (ii) a Class 9b early childhood centre. Where the lowest level of the window opening is less than 1.7 m above the floor, a window opening covered by (1)must comply with the following: (a) The openable portion of the window must be protected with— (i) a device capable of restricting the window opening; or (ii) a screen with secure fittings. (b) a device or screen required by (a) must—	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
			(i) not permit a 125 mm sphere to pass through the window opening or screen; and (ii) resist an outward horizontal action of 250 N against the— (aa) window restrained by a device; or (bb) screen protecting the opening; and (iii) have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden. A barrier with a height not less than 865 mm above the floor is required to an openable window— (i) in addition to window protection, when a child resistant release mechanism is required; and (ii) where the floor below the window is 4 m or more above the surface beneath if the window is not protected. This is applicable to all class buildings.	
Part D4 - Access for People with a Disability				
D4D5	Exemptions	Noted	The following areas are not required to be accessible: (a) An area where access would be inappropriate because of the particular purpose for which the area is used. (b) An area that would pose a health or safety risk for people with a disability. (c) Any path of travel providing access only to an area exempted by (a) or (b).	**Access Consultant to review and provide advice.**
Section E - Services and Equipment				
Part E1 - Fire Fighting Equipment				

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
E1D2	Fire hydrants	Performance Solution Proposed	A fire hydrant system must be provided to serve a building with a total floor area of more than 500m2. The hydrant system shall comply with the provisions of E1D2 and AS2419.1-2021 Booster assemblies are to be located in accordance with the provisions of Clause 7.3.1 of AS2419.1-2021 Further details of the proposed hydrant system is to be provided demonstrating compliance with this clause and any applicable Fire Engineering requirements	**1 - Provide details and location of the pump room or enclosure** **2 - <u>Non-Provision of Large Bore Sprinkler Suction Booster</u>** **<u>OR Non-Compliant Vertical Lift for Large Bore Sprinkler Suction Booster</u>** **• Option 1 – Deleting large bore suction booster for the sprinkler system (based on on-site water storage capable of providing 120% flow of water for the sprinkler system and fire hydrant flow being fully serviced by the town's main), instead of providing a large bore suction booster under AS 2118.1-2017.** **• Option 2 – Providing large bore suction booster for the sprinkler system but the maximum vertical lift of the dry pipe for the large bore suction is approx. 4.6 m, instead of 3 m allowed under AS 2419.1-2021 (or 2.8 m allowed in relation to the FRNSW Position Statements).**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
E1D3	Fire hose reels	Compliance Readily Achievable	A fire hose reel system must be provided - (a) to serve the whole building where one or more internal fire hydrants are installed; or (b) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500m2 Fire hose reels shall comply with E1D3 and AS2441 In achieving system coverage, one or a combination of the following criteria for individual internally located fire hose reels must be met in determining the layout of any fire hose reel system: (a) Fire hose reels must be located adjacent to an internal fire hydrant (other than one within a fire-isolated exit), except that a fire hose reel need not be located adjacent to every fire hydrant, provided system coverage can be achieved. (b) fire hose reels must be located within 4m of an exit, except that a fire hose reel need not be located adjacent to every exit, provided system coverage. (c) Where system coverage is not achieved by compliance with (a) and (b), additional fire hose reels may be located in paths of travel to an exit to achieve the required coverage Further details of the proposed fire hose reel system is to be provided demonstrating compliance with this clause and any applicable Fire Engineering requirements.	**Hydraulic engineer certification to be provided for review by the PCA with the Construction Certificate Application.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
NSW E1D4	Sprinklers	Performance Solution Proposed	Sprinkler systems must be installed with the following where applicable: (a) E1D5 to E1D12 (b) Specification 17 and Specification 18 Compliance readily achievable - details of the proposed system are to be provided for further review	**Non-Provision of Large Bore Sprinkler Suction Booster** **OR Non-Compliant Vertical Lift for Large Bore Sprinkler Suction Booster** **• Option 1 – Deleting large bore suction booster for the sprinkler system (based on on-site water storage capable of providing 120% flow of water for the sprinkler system and fire hydrant flow being fully serviced by the town's main), instead of providing a large bore suction booster under AS 2118.1-2017.** **• Option 2 – Providing large bore suction booster for the sprinkler system but the maximum vertical lift of the dry pipe for the large bore suction is approx. 4.6 m, instead of 3 m allowed under AS 2419.1-2021 (or 2.8 m allowed in relation to the FRNSW Position Statements).**
E1D5	Where sprinklers are required: all classifications	Compliance Readily Achievable	Sprinklers are required throughout all buildings if any part of the building has an effective height greater than 25m. Note this applies to open deck carparks contained in a multi classified building Compliance achievable - details of the proposed sprinkler system shall be provided for further review	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
E1D6	Where sprinklers are required: Class 2 and 3 building used as residential care building	Compliance Appears Achieved	Applies to a Class 2 or 3 building and any other class of building containing a Class 2 or 3 part. Note this does not relate to a residential care building Sprinklers are required throughout where any part of the building has - (a) a rise in storeys of 4 or more; and (b) an effective height of not more than 25m Compliance achievable - details of the proposed system are required to be provided for further review	**Building has a rise in story of 4. A sprinkler system is required.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
E1D14	Portable fire extinguishers	Compliance Readily Achievable	Portable Fire Extinguishers shall be provided as follows: **<u>For Class 2, 3 or Class 4 parts -</u>** To serve the building where one or more internal fire hydrants are provided, or to serve any fire compartment with a floor area greater than 500m2 (this includes a SOU) Portable fire extinguishers must comply with the provisions of this clause, AS2444 and meet the following requirements - (a) they shall be a ABE type extinguisher (b) they shall be a minimum 2.5kg extinguisher (c) distributed outside a SOU to serve only the storey at which they are located and so that the travel distance from the entrance doorway of any SOU to the nearest extinguisher is not more than 10m **<u>For Class 2 - 9 buildings</u>** To serve a class 5 building where one or more internal fire hydrants are provided, or to serve any fire compartment with a floor area greater than 500m2. Portable fire extinguishers must be provided in accordance with Clause E1D14 and AS2444 and the associated fire risks prescribed under these standards Compliance achievable - further details of all PFE locations to be provided for review in accordance with this clause, any relevant Fire Engineering Report and EFSG guidelines	**Fire Services Design Statement required.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
E1D16	Fire precautions during construction	Noted	Note Suitable fire extinguishers shall be located adjacent to exits on each storey while the building is under construction. Once the building reaches an effective above 12m fire hydrants, FHRs and the hydrant booster connection shall be commissioned and operational.	
E1D17	Provision for special hazards	Compliance Readily Achievable	Suitable additional provision must be made if special problems of fighting fire could arise because of - (a) the nature or quantity of materials stored, displayed or used in a building or on the allotment; or (b) the location of the building in relation to a water supply for fire-fighting purposes Due to the special nature of the proposed building it has been determined that provisions for special hazards must be adopted. A registered Certifier - Fire Safety shall provide a report outlining the measures proposed to mitigate the special hazard and satisfy the requirements of Clause E1D17 of the BCA	**The building is proposed to have solar panels on the roof. This shall be document in the FEBQ as a hazard for FRNSW comment.**
Part E2 - Smoke Hazard Management				

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
E2D3	Air handling system other than as part of a smoke hazard management system	Compliance Readily Achievable	An air-handling system which does not form part of a smoke hazard management system in accordance with this Part and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must, subject to (2), be designed and installed— (a) to operate as a smoke control system in accordance with AS 1668.1; or (b) such that it— - incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and - is arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1 Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with that Section of the Standard	**Noted - Mechanical and fire services engineer to provide design certification.**
E2D8	Buildings not more than 25m in effective	Compliance Readily Achievable	In a Class 2 and 3 building or part of a building, or Class 4 part of a building, if the building is not more than 25 m in effective height— (a) it must be provided with an automatic smoke detection	**Smoke detection and alarm and a sprinkler system is proposed for the building. Fire Service engineer to provide design certification.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
	height: Class 2 and 3 buildings and Class 4 part of the building		and alarm system complying with Specification 20; and (b) where a required fire-isolated stairway serving the Class 2 or 3 parts also serves one or more storeys of Class 5, 6, 7 (other than an open-deck carpark), 8 or 9b parts— (i) the fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp, must be provided with an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1; or (ii) the Class 5, 6, 7 (other than an open-deck carpark), 8 and 9b parts must be provided with— (A) an automatic smoke detection and alarm system complying with Specification 20; or (B) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17; and (c) where a required fire-isolated stairway serving the Class 4 part also serves one or more storeys of Class 5, 6, 7 (other than an open-deck carpark), 8 or 9b parts— (i) a system complying with (b)(i) or (b)(ii) must be installed; or (ii) a smoke alarm or detector system complying with Specification 20 must be provided except that alarms or detectors need only be installed adjacent to each doorway into each fire-isolated stairway (set back horizontally from the doorway by a distance of not more than 1.5 m) to initiate a building occupant warning system for the Class 4 part	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
E2D12	Class 7a buildings	Compliance Readily Achievable	A class 7a building including a basement, provided with mechanical ventilation system in accordance with AS1668.2 must comply with clause 5.5 of AS 1668.1-2015.	**Mechanical engineer to provide design certification.**
Part E3 - Lift Installations				
E3D3	Stretcher facility in lifts	Compliance Readily Achievable	Buildings with an effective height greater than 12m or where emergency lifts are provided shall accommodate stretcher facilities via a space that is not less than 600mm wide x 2000mm long x 1400mm high above the floor level.	
E3D4	Warning against use of lifts in fire	Compliance Readily Achievable	Warning signs must be displayed; "DO NOT USE LIFTS IF THERE IS A FIRE". No less than 10mm high that are incised, inlaid or embossed on a metal, wood, plastic or similar plate securely & permanently attached to the wall or provided directly into the surface material of the wall. These shall be near every call button for a passenger lift or group throughout the building. Details demonstrating compliance shall be provided	**Lift supplier to provide design certification**
E3D6	Landings	Compliance Readily Achievable	Access and egress to and from lift landings shall comply with Section D of the BCA. Details demonstrating compliance shall be provided	**Lift supplier to provide design certification**
E3D7	Passenger lifts	Compliance Readily Achievable	In an accessible building, every passenger lift shall comply with the limitations of Table E3.6a of the BCA, be provided accessible features as required by E3D8 of the BCA and not rely upon a constant pressure device for its operation if the lift car is fully enclosed. Details demonstrating compliance shall be provided	
E3D8	Accessible features required for passenger lifts	Compliance Readily Achievable		**Access consultant shall provide assessment and design certification**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
E3D9	Fire service controls	Compliance Readily Achievable	Any lift or group fof lifts that serve a storey above 12m effective height, shall be provided a fire service recall control switch complying with Clause E3D11 and a lift car fire service drive control switch complying with Clause E3.10 of the BCA. Details demonstrating compliance shall be provided	**Lift supplier to provide design certification**
E3D11	Fire service recall control switch	Compliance Readily Achievable	Each group of lifts must be provided with one fire service recall control switch that activates the fire service recall operation in accordance with Clause E3D11 of the BCA. Details demonstrating compliance shall be provided	**Lift supplier to provide design certification**
E3D12	Lift car fire service drive control switch	Compliance Readily Achievable	The lift car fire service drive control switch must be activated from within the lift car and comply with the requirements of Clause E3.10 of the BCA. Details demonstrating compliance shall be provided	**Lift supplier to provide design certification**
Part E4 - Emergency Lighting, Exit Signs and Warning Systems				
E4D2	Emergency lighting requirements	Compliance Readily Achievable	Emergency Lighting to be provided to the building in accordance with E4 and AS 2293.1-2018. Design Certification to be provided prior to CC.	**Electrical engineer to provide design certification.**
E4D3	Measurement of distance	Compliance Readily Achievable	Emergency Lighting & Exit Signage to be provided to the building in accordance with E4 and AS 2293.1-2018. Design Certification to be provided prior to CC.	**Electrical engineer to provide design certification.**
E4D4	Design and operation of emergency lighting	Compliance Readily Achievable	Design and operation of emergency lighting to be provided to the building in accordance with E4 and AS 2293.1-2018. Design Certification to be provided prior to CC.	**Electrical engineer to provide design certification.**
E4D5	Exit signs	Compliance Readily Achievable	Exit Signage to be provided to the building in accordance with E4 and AS 2293.1-2018. Design Certification to be provided prior to CC.	**Electrical engineer to provide design certification.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
E4D6	Direction signs	Compliance Readily Achievable	Direction Signs to be provided to the building in accordance with E4 and AS 2293.1-2018. Design Certification to be provided prior to CC.	**Electrical engineer to provide design certification.**
E4D8	Design and operation of exit signs	Compliance Readily Achievable	Design and operation of exit signs to be provided to the building in accordance with E4 and AS 2293.1-2018. Design Certification to be provided prior to CC.	**Electrical engineer to provide design certification.**
Specifications				
Specification 17	Fire Sprinkler Systems	Performance Solution Proposed	Sprinklers shall be designed to comply with Spec 17	**Fire sprinkler systems Location of the sprinkler alarm valves being located within the fire services pump room, in lieu of complying with BCA Specification 17.**
Specification 18	Class 2 and 3 buildings not more than 25m in effective height	Compliance Readily Achievable	Sprinklers shall be designed to comply with Spec 18	**Sprinklers shall be designed to comply with Spec 18 - Fire service engineer to provide design certification**
Specification 20	Smoke Detection and Alarm Systems	Compliance Readily Achievable	The building must be provided with— (d) in each required fire-isolated stairway, an automatic air pressurisation system for fire-isolated exits in accordance with AS/NZS 1668.1; or (e) a zone smoke control system in accordance with AS/NZS 1668.1, if the building has more than one fire compartment; or (f) an automatic smoke detection and alarm system complying with Specification E2.2a; or (g) a sprinkler system complying with Specification E1.5. Detail of the system proposed including certification from	**Sprinklers and Smoke detection and alarm are proposed to be adopted.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
			the relevant Engineer to be provided including design certification.	
Specification 23	Residential Fire Safety System	Compliance Readily Achievable	Specification 23 to be complied with	**Connection of sprinkler system to fire station is required in accordance with this clause S23C3.**
Specification 24	Lift Installations	Compliance Readily Achievable	Specification 24 to be complied with	
Section F - Health and Safety				
Part F1 - Surface Water Management, rising damp and external waterproofing				
F1D1	Deemed-to-Satisfy Provisions	Noted	Noted.	
F1D2	Application of Part	Noted		
F1D3	Stormwater drainage	Compliance Readily Achievable	Stormwater drainage shall comply with AS 3500.3-2018. Details of the proposed Stormwater Management System shall be provided. This detail shall be certified by a suitably qualified and Chartered Engineer	**Hydraulic Engineer to provide design certification.** **Details be provided and reviewed by the PCA with the application for a Construction Certificate.**
F1D5	External Waterproofing membranes	Compliance Readily Achievable	External waterproofing must be designed to comply with AS4654.1 and 2.	**Declared designs are to show water proofing details, hop designs, falls and drainage. Provide supporting manufactures technical details and specifications in accordance with AS4654.1 & 2** **This shall be provided with the application for a Construction Certificate.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
F1D6	Damp-proofing	Compliance Readily Achievable	Moisture from the ground must be prevented from reaching the structure of the building. Where a damp-proof course is provided it must comply with AS 2904-1995 or impervious sheet material in accordance with AS3660.1-2014. Details demonstrating compliance shall be provided	**Architectural details to be provided demonstrating compliance with this clause.** **This shall be provided with the application for a Construction Certificate.**
F1D7	Damp-proofing of floors on the ground	Compliance Readily Achievable	Floors laid on ground shall be provided a vapour barrier in accordance with AS 2870-2011. Details demonstrating compliance shall be provided	**Architectural details to be provided demonstrating compliance with this clause.** **This shall be provided with the application for a Construction Certificate.**
Part F2 - Wet areas and overflow protection				
F2D2	Wet area construction	Compliance Readily Achievable	Wat area construction must be water resistance and waterproofed in accordance with this clause and AS2740.	**Declared designs are to show water resistant and waterproofing details. Provide supporting manufactures technical details and specifications in accordance with Specification 26 and AS3740.** **This shall be provided and assessed by the PCA with the application for a Construction Certificate.**
F2D4	Floor wastes	Compliance Readily Achievable	In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above another SOU or public space must be provided a floor waste and the floor be graded to the floor waste to permit drainage of water.	**Architectural details to be provided demonstrating compliance with this clause.** **This shall be provided and assessed by the PCA with the application for a Construction Certificate.**
Part F3 - Roof and wall cladding				

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
F3D1	Deemed-to-Satisfy Provisions	Compliance Readily Achievable	The roof must be covered with one of the following materials, concrete roof tiles, terracotta roof tiles, cellulose cement corrugated sheeting, metal sheet roofing, plastic sheet roofing or shingles made of terracotta, fibre cement, timber, or slate. Compliance with fire resisting construction and non-combustible construction of Part C must also be achieved as applicable. Where none of the above materials is proposed, a Performance Solution addressing Performance Requirements FP1.4 will be required	**Noted.**
F3D2	Roof coverings	Compliance Readily Achievable	Roof coverings are to be provided in accordance with this clause	**Architectural details to be provided demonstrating compliance with this clause.** **This shall be provided and assessed by the PCA with the application for a Construction Certificate.**
F3D4	Glazed assemblies	Compliance Readily Achievable	Glazed assemblies in an external wall shall comply with AS 2047-2014. The following glazed assemblies need not comply revolving doors, fixed louvres, skylights / roof lights, sliding and swinging doors without a frame, heritage windows or second-hand windows, windows constructed onsite which are not design tested. Details demonstrating compliance shall be provided	**Architectural details to be provided demonstrating compliance with this clause.** **This shall be provided and assessed by the PCA with the application for a Construction Certificate.**
F3D5	Wall cladding	Compliance Readily Achievable	Wall cladding must comply with one or a combination of the following: (a) Masonry, including masonry veneer, un-reinforced and reinforced masonry. AS3700	**Masonry external walls are proposed. This must be designed to comply with AS3700. Architectural details to be provided demonstrating compliance with this clause.** **This shall be provided and assessed by**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
				the PCA with the application for a Construction Certificate.
Sanitary and Other Facilities				
F4D2	Facilities in residential buildings	Compliance Readily Achievable	Facilities for cooking, washing, cleaning, and laundering shall be provided as required for the classification concerned by Clause F2.2 of the BCA. Details demonstrating compliance shall be provided	**Sou's are proposed to incorporate the required sanitary facilities.**
F4D4	Facilities in Class 3 to 9 buildings	Compliance Appears Achieved	Facilities in accordance with Table F2.3 shall be provided for the classification and use concerned shall be provided.	**Refer to BCA Report Appendix.**
F4D5	Accessible sanitary facilities	Compliance Readily Achievable	Accessible sanitary facilities compliant with AS 1428.1-2009 shall be provided in accordance with Clause F2.4 and Table F2.4 for the classification and use concerned. Details demonstrating compliance shall be provided	
F4D6	Accessible unisex sanitary compartments	Compliance Readily Achievable		**Refer to Access consultant report**
Part F5 Room Heights				
F5D2	Height of rooms and other spaces	Compliance Readily Achievable	Floor to ceiling heights compliant with Clause F5D2 of the BCA shall be achieved throughout the development	**Rooms are proposed to be 2.8m in height throughout.**
Part F6 - Light and Ventilation				
F6D2	Provision of natural light	Compliance Readily Achievable	Natural light requirements of the BCA are applicable to all habitable room of Class 2, and 4 buildings. Details demonstrating compliance shall be provided	**Natural light is proposed to all habitable rooms. Architect to provide design certification.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
F6D3	Methods and extent of natural lighting	Compliance Readily Achievable	Windows that provide the required natural light shall be not less than 10% of the floor area of the room, roof lights shall be not less than 3% of the floor area. A required window for the purposes of natural light shall be not less than the greater of:- 1m, (3m in a patient care area or other room used for sleeping in a Class 9a building) or 50% of the square root of the exterior height of the wall in which the window is located measured in metres from its sill. Details demonstrating compliance shall be provided	**Natural light is proposed to all habitable rooms. Architect to provide design certification.** **This shall be provided with the application for a Construction Certificate.**
F6D5	Artificial lighting	Compliance Readily Achievable	Artificial lighting shall be provided to required stairways, passageways, and ramps. Artificial lighting shall comply	**Electrical engineer to provide design certification.** **This shall be provided with the application for a Construction Certificate.**
F6D6	Ventilation of rooms	Compliance Readily Achievable	Natural ventilation or mechanical ventilation to be provided. Mechanical Engineer to confirm compliance with F4.5 and AS 3666.1. If compliance with DtS not achievable a Performance Solution demonstrating compliance with FP4.3 and FP4.4 may be more appropriate.	**Mechanical engineer to provide design certification.** **This shall be provided with the application for a Construction Certificate.**
F6D9	Restriction on location of sanitary compartments	Compliance Readily Achievable	Sanitary compartments must not open directly into— (a) a kitchen or pantry; or (b) a public dining room or restaurant; or (c) a dormitory in a Class 3 building; or (d) a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand); or (e) a workplace normally occupied by more than one person.	**Compliance appears achieved.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
F6D11	Carparks	Compliance Readily Achievable	Every storey of a carpark, except an open-deck carpark, must have— (a) a system of mechanical ventilation complying with AS 1668.2; or (b) a system of natural ventilation complying with Section 4 of AS 1668.4.	**Mechanical engineer to provide design certification.**
F6D12	Kitchen local exhaust ventilation	Compliance Readily Achievable	A commercial kitchen must be provided with a kitchen exhaust hood complying with AS 1668.1 and AS 1668.2 where— (a) any cooking apparatus has— (i) a total maximum electrical power input exceeding 8 kW; or (ii) a total gas power input exceeding 29 MJ/h; or (b) the total maximum power input to more than one apparatus exceeds— (i) 0.5 kW electrical power; or (ii) 1.8 MJ/hour gas, per m2 of floor area of the room or enclosure.	**Mechanical engineer to provide design certification.**
Part F7 - Sound Transmission and Insulation				
F7D2	Application of Part		The Deemed-to-Satisfy Provisions of this Part apply to Class 2 and 3 buildings and Class 9c buildings.	
F7D3	Determination of airborne sound insulation ratings	Compliance Readily Achievable	Rely on certification from a registered Architect or Acoustic Consultant	**A report from a qualified acoustic engineer will need to be provided to validate compliance with the BCA, this shall be provided and assessed by the PCA with the application for a Construction Certificate.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
F7D4	Determination of impact sound insulation ratings	Compliance Readily Achievable	Rely on certification from a registered Architect or Acoustic Consultant	**A report from a qualified acoustic engineer will need to be provided to validate compliance with the BCA, this shall be provided and assessed by the PCA with the application for a Construction Certificate.**
F7D5	Sound insulation rating of floors	Compliance Readily Achievable	Rely on certification from a registered Architect or Acoustic Consultant	**A report from a qualified acoustic engineer will need to be provided to validate compliance with the BCA, this shall be provided and assessed by the PCA with the application for a Construction Certificate.**
F7D6	Sound insulation rating of walls	Compliance Readily Achievable	Rely on certification from a registered Architect or Acoustic Consultant	**A report from a qualified acoustic engineer will need to be provided to validate compliance with the BCA, this shall be provided and assessed by the PCA with the application for a Construction Certificate.**
F7D7	Sound insulation rating of internal services	Compliance Readily Achievable	Rely on certification from a registered Architect or Acoustic Consultant	**A report from a qualified acoustic engineer will need to be provided to validate compliance with the BCA, this shall be provided and assessed by the PCA with the application for a Construction Certificate.**
F7D8	Sound isolation of pumps	Compliance Readily Achievable	Rely on certification from a registered Architect or Acoustic Consultant	**A report from a qualified acoustic engineer will need to be provided to validate compliance with the BCA, this shall be provided and assessed by the PCA with the application for a Construction Certificate.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
Part F8 - Condensation Management				
F8D4	Flow rate and discharge of exhaust systems	Further Details Required	(a) An exhaust system installed in a kitchen, bathroom, sanitary compartment, or laundry must have a minimum flow rate of- (i) 25 L/s for a bathroom or sanitary compartment; and (ii) 40 L/s for a kitchen or laundry (b) Exhaust from a kitchen must be discharged directly or via a shaft or duct to outdoor air. (c) Exhaust from a bathroom, sanitary compartment, or laundry must be discharged- (i) directly or via a shaft or duct to outdoor air; or (ii) to a roof space that is ventilated in accordance with F6.4	**Mechanical engineer to provide design certification.** **This shall be provided with the application for a Construction Certificate.**
F8D5	Ventilation of roof spaces	Further Details Required	(a) Where an exhaust system covered byF8D4 discharges directly or via a shaft or duct into a roof space, the roof must be ventilated to outdoor air through evenly distributed openings. (b) Openings required by (a) must have a total unobstructed area of 1/300 of the respective ceiling area if the roof pitch is greater than 22°, or 1/150 of the respective ceiling area if the roof pitch is less than or equal to 22° (c) 30% of the total unobstructed area required by (b) must be located not more than 900mm below the ridge or highest point of the roof space, measured vertically, with the remaining required area provided by eave vents.	**Mechanical engineer to provide design certification.** **This shall be provided with the application for a Construction Certificate.**
Specifications				
Specification 26	Waterproofing and water-resistance	Compliance Readily Achievable	Compliance with specification required.	**Architectural details to be provided demonstrating compliance with this clause.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
	requirements for building elements in wet areas			**This shall be reviewed by the PCA with the application for a Construction Certificate.**
Specification 28	Sound Insulation for Building Elements	Compliance Readily Achievable	Compliance with specification required.	**Architectural/ Acoustic details to be provided demonstrating compliance with this clause.** **This shall be reviewed by the PCA with the application for a Construction Certificate.**
Specification 29	Impact Sound -Test of Equivalence	Compliance Readily Achievable	Compliance with specification required.	**Architectural/ Acoustic details to be provided demonstrating compliance with this clause.** **This shall be reviewed by the PCA with the application for a Construction Certificate.**
Section G - Ancillary Provisions				
Part G6 - Occupiable outfoor areas				
G6D1	Application of Part	Compliance Readily Achievable	(a) The Deemed-to-Satisfy Provisions of this Part apply to buildings containing an occupiable outdoor area in addition to the other Deemed-to-Satisfy Provisions of the BCA. (b) The Deemed-to-Satisfy Provisions of this Part take precedence where there is a difference to The Deemed-to-Satisfy Provisions of Sections C, D, E, F and G. (c) Except for G6.2, The Deemed-to-Satisfy Provisions of this Part do not apply to- (i) an occupiable outdoor area of a sole-occupancy unit in a Class 2 or 3 building, class 9c building or Class 4 part of a building; or	

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
			(ii) an occupiable outdoor area with an area less than 10m².	
G6D2	Fire hazard properties	Compliance Readily Achievable	(a) subject to (b), a lining, material or assembly in an occupiable outdoor area must comply with C2D10 as fir an internal element. (b) The following fire hazard properties of a lining, material or assembly in an occupiable outdoor area are not required to comply with C2D10: (i) Average specific extinction area. (ii) Smoke-Developed Index (iii) Smoke development rate (iv) Smoke growth rate index (SMOGRArc)	**External materials serving the outdoor class 6 portions are to comply with this clause. Provide a schedule of materials, location points and testing data.** **This shall be reviewed by the PCA with the application for a Construction Certificate.**
G6D3	Fire Separation	Further Details Required	For the purpose of the Deemed-to-Satisfy Provisions of C3D8, C3D9 and C3D10, 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.	**Provide detail for the proposed use of cupboards in lift lobby.** **EDB and Comms rooms to include non-combustible doors and smoke seals as per D3D8 of the BCA**
G6D4	Provision of escape	Compliance Appears Achieved	For the purpose of the Deemed-to-Satisfy Provisions of Part D1, a reference to a storey or room includes an occupiable outdoor area.	**Compliance achieved.**
G6D5	Construction of exits	Compliance Appears Achieved	For the purpose of the Deemed-to-Satisfy of Part D2, a reference to a storey or room includes an occupiable outdoor area	**Compliance achieved.**
G6D6	Firefighting equipment	Compliance Readily Achievable	Except for S17C7(2)(a) for the purposes of the Deemed-to-Satisfy Provisions of Part E1, a reference to a storey includes and occupiable outdoor area.	**Fire Services Design Statement required.**

BCA Clause	Compliance Provisions	Status	MBC Assessment Report Commentary	MBC Notes for Inspection
G6D7	Lift installations	Compliance Appears Achieved	For the purpose of Deemed-to-Satisfy Provisions of Part E3, a reference to a storey includes an occupiable outdoor area.	**Compliance achieved.**
G6D8	Visibility in an emergency, exit signs and warning systems	Compliance Readily Achievable	For the purpose of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area	**Electrical engineer to provide design certification.**
G6D9	Light and ventilation	Compliance Readily Achievable	For the purpose 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**
Section J - Energy Efficiency				
J2D1	Deemed-to-Satisfy Provisions	Compliance Readily Achievable	Part J Report to be provided by Architect or ESD Consultant. ESD Consultant or Architect to certify CC Plans achieve compliance with Part J.	**This shall be reviewed by the PCA with the application for a Construction Certificate.**

6 Appendix A – Architectural Plans Reviewed

The following documentation, prepared by Richard Cole Architecture was used in the assessment and preparation of this report: -

Drawing No.	Title	Date	Drawn By	Revision
CC000 Keynotes	Construction Certificate	17/07/2024	-	QQ
CC001	BASIX Commitments	17/07/2024	-	QQ
CC002	Site Plan	17/07/2024	-	QQ
CC003	Public Domain Plan	17/07/2024	-	QQ
CC004	Public Domain Plan -Detail	17/07/2024	-	QQ
CC005	Demolition Plan	17/07/2024	-	QQ
CC006	Excavation Plan	17/07/2024	-	QQ
CC007	Piering Plan	17/07/2024	-	QQ
CC008	Basement Floor Plan	17/07/2024	-	SS
CC009	Ground Floor Plan	17/07/2024	-	SS
CC010	Level 1 Plan	17/07/2024	-	SS
CC011	Level 2 Plan	17/07/2024	-	SS
CC012	Level 3 Plan	17/07/2024	-	SS
CC013	Level 4 Plan	17/07/2024	-	SS
CC014	Roof Plan	17/07/2024	-	QQ
CC015	Elevations	17/07/2024	-	QQ
CC016	Elevations	17/07/2024	-	QQ
CC017	Sections	17/07/2024	-	SS
CC018	Sections	17/07/2024	-	SS
CC019	Sections	17/07/2024	-	SS
CC020	Sections -Retaining wall Elevations	17/07/2024	-	QQ
CC021	Basement RCP	17/07/2024	-	QQ
CC022	Ground Floor RCP	17/07/2024	-	QQ
CC023	Level 1 & Level 2 RCP	17/07/2024	-	QQ
CC024	Level 3 & Level 4 RCP	17/07/2024	-	QQ
CC025	Services Diagrams	17/07/2024	-	QQ
CC026	Concrete Profile/Waterproofing - Basement/Ground Floor	17/07/2024	-	QQ
CC027	Concrete Profile/Waterproofing - Level 1 & 2	17/07/2024	-	QQ
CC028	Concrete Profile/Waterproofing - Level 3	17/07/2024	-	QQ
CC029	Concrete Profile/Waterproofing - Level 4 & Roof	17/07/2024	-	QQ
CC030	Door & Window Schedule- Basement, Ground & Retail	17/07/2024	-	QQ
CC031	Door & Window Schedule -Level 1 & 2	17/07/2024	-	QQ

Drawing No.	Title	Date	Drawn By	Revision
CC032	Door & Window Schedule -Level 3 & 4 (Apartments)	17/07/2024	-	QQ
CC033	Door & Window Schedule	17/07/2024	-	QQ
CC034	Door & Window Schedule	17/07/2024	-	QQ
CC035	Terrazzo Screen Schedule	17/07/2024	-	QQ
CC036	Balustrade Schedule	17/07/2024	-	QQ
CC037	Balustrade Schedule	17/07/2024	-	QQ
CC038	Wall Plan Schedule	17/07/2024	-	RR
CC039	Signage Schedule	17/07/2024	-	QQ
CC040	Signage -Statutory Signage	17/07/2024	-	QQ
CC041	Apartment 1 Plan	17/07/2024	-	QQ
CC042	Apartment 2 Plan lower	17/07/2024	-	QQ
CC043	Apartment 2 Plan upper	17/07/2024	-	QQ
CC044	Apartment 3 Plan	17/07/2024	-	QQ
CC045	Apartment 4 Plan	17/07/2024	-	QQ
CC046	Apartment 5 Plan	17/07/2024	-	QQ
CC047	Ground Floor Retail Plan	17/07/2024	-	QQ
CC048	Level 3 Retail Plan	17/07/2024	-	QQ
CC049	Driveway Details	17/07/2024	-	QQ
CC050	Apartment 1 RCP	17/07/2024	-	QQ
CC051	Apartment 2 RCP	17/07/2024	-	QQ
CC052	Apartment 2 RCP -upper	17/07/2024	-	QQ
CC053	Apartment 3 RCP	17/07/2024	-	QQ
CC054	Apartment 4 RCP	17/07/2024	-	QQ
CC055	Apartment 5 RCP	17/07/2024	-	QQ
CC056	Ground Floor Retail RCP	17/07/2024	-	QQ
CC057	Level 3 Retail RCP	17/07/2024	-	QQ
CC058	Services Set-out	17/07/2024	-	RR
CC059	Ramp and Platform Lift Details	17/07/2024	-	QQ
CC060	Stair/Lift Details	17/07/2024	-	QQ
CC061	Stair/lift Details	17/07/2024	-	QQ
CC062	Stair and Substation Details	17/07/2024	-	QQ
CC063	Stair Details	17/07/2024	-	QQ
CC064	Detail Sections	17/07/2024	-	QQ
CC065	Detail Sections	17/07/2024	-	QQ
CC066	Detail Sections	17/07/2024	-	QQ
CC067	Detail Sections	17/07/2024	-	QQ
CC068	Details	17/07/2024	-	QQ
CC069	Waterproofing Details	17/07/2024	-	QQ
CC070	Wet Areas -Apartment 1	17/07/2024	-	QQ
CC071	Wet Areas -Apartment 1	17/07/2024	-	QQ
CC072	Wet Areas -Apartment 2	17/07/2024	-	QQ
CC073	Wet Areas -Apartment 2	17/07/2024	-	QQ
CC074	Wet Areas -Apartment 2	17/07/2024	-	QQ
CC075	Wet Areas -Apartment 3	17/07/2024	-	QQ

Drawing No.	Title	Date	Drawn By	Revision
CC076	Wet Areas -Apartment 3	17/07/2024	-	QQ
CC077	Wet Areas -Apartment 4	17/07/2024	-	QQ
CC078	Wet Areas -Apartment 4	17/07/2024	-	QQ
CC079	Wet Areas -Apartment 5	17/07/2024	-	QQ
CC080	Wet Areas -Apartment 5	17/07/2024	-	QQ
CC081	Wet Areas -Apartment 5	17/07/2024	-	QQ
CC082	Wet Areas -Ground Floor Retail	17/07/2024	-	QQ
CC083	Wet Areas -Ground Floor Retail	17/07/2024	-	QQ
CC084	Wet Areas -Ground Floor Retail	17/07/2024	-	QQ
CC085	Wet Areas -Level 3	17/07/2024	-	QQ
CC125	Fire Compartment Diagrams	17/07/2024	-	SS

7 Appendix B - Specification 5 Fire-Resisting Construction

7.1 Type A Fire-Resisting Construction

Table 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 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 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 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 S5C11e: Type A construction: FRL of loadbearing internal 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
Fire-resisting lift and stair *shafts*	90/90/90	120/120/120	180/120/120	240/120/120
Bounding *public corridors*, public lobbies and the like	90/90/90	120/–/–	180/–/–	240/–/–
Between or bounding *sole-occupancy units*	90/90/90	120/–/–	180/–/–	240/–/–
Ventilating, pipe, garbage, and like *shafts* not used for the discharge of hot products of combustion	90/90/90	120/90/90	180/120/120	240/120/120

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

Location	FRL (in minutes): *Structural adequacy/ Integrity / Insulation*			
	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 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

8 Appendix C – Occupancy Calculations

The floor area estimations have been provided by Richard Cole Architects. This does not account for any fixtures or fittings that may occupy floor space. This would only reduce the number of occupants.

Level				
Subject Area	Occupancy Use	D2D18 Density	Floor Area (approx.)	Population Determined
Retail 1	Food and Drink	1m^2 / person	188m^2	188
Retail 2	Shop	3m^2 / person	62m^2	21
Retail 3	Shop	3m^2 / person	33m^2	11

9 Appendix D – Aggregate Egress Width Calculations

The following has been determined from the submitted details from Richard Cole Architects

Aggregate Egress Widths					
Part of Development	Population	Egress Width Required	Means of Egress	Egress Width Provided	Status
Retail 1	188	2m	1 x Fire stair Perimeter exit doors	4m	Complies
Retail 2	21	1m	Perimeter exit doors	1m	Complies
Retail 3	11	1m	Perimeter exit doors	1m	Complies
Carpark	16	2m*	1 x fire stairs 1 x external stairway	2m	Complies

*A basement level must have 2 available exits.

10 Appendix E – Sanitary Facilities Calculations

The following has been determined based on the F4F2 of the BCA

Sanitary Facility Calculations													
Description of building or part	Occupant Number	Population No.		Required			Provided			Difference		
				WC	U	B	WC	U	B	WC	U	B
Retail 1 - Staff	18	Male	9	1	0	1						
		Female	9	1		1						
Retail 1 - Patrons	191	Male	96	1	2	2						
		Female	96	3		2						
Total	209	Male	105	2	2	3	*3	2	*3	+1*	0	+1*
		Female	105	3		2	*4		*3	+1*		+1*
		Accessible	94	1		1	1		1	0		0
Description of building or part	Occupant Number	Population No.		Required			Provided			Difference		
				WC	U	B	WC	U	B	WC	U	B
Retail 2 - Staff	2	Male	1	1	0	1	1		1	0		0
		Female	1	1		1	1		1	0		0
Retail 2 - Patrons	19	Male	9	0	0	0						
		Female	9	0		0						
Description of building or part	Occupant Number	Population No.		Required			Provided			Difference		
				WC	U	B	WC	U	B	WC	U	B
Retail 3 Staff only	9	Male	5	1		1	1		1	0		0
		Female	5	1		1	1		1	0		0

Key:
*signifies a unisex accessible sanitary facility was added to this facility
`signifies a pan was counted as a urinal or vice versa
Red numbers signify a deficiency in facilities

Note:
Retail 2 & 3 - Patron numbers are anticipated to be <20. Therefore, patron sanitary facilities are not required to be provided.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