



STEVE WATSON
& PARTNERS

83-99 North Terrace, Bankstown

BCA Assessment Report

Report 2023/0190 R1.1

Prepared for Essence Project Management Pty. Ltd.
May 2024



Steve Watson and Partners Pty Ltd

SYDNEY	Level 17, 456 Kent Street, Sydney NSW 2000	Phone +61 2 9283 6555	Fax +61 2 9283 8500
MELBOURNE	Level 8, 350 Queen Street, Melbourne, VIC 3000	Phone: +61 3 9380 5552	Fax: +61 3 9380 5558
BRISBANE	Level 3, 276 Edward Street, Brisbane, QLD 4000	Phone: +61 7 3088 2333	Fax: +61 7 3088 2444
CANBERRA	Level 1, Unit 14, 27 Hopetoun, Circuit, Deakin ACT 2600	Phone: +61 2 6100 6606	Fax: +61 2 6100 6609

info@swpartners.com.au www.swpartners.com.au

ABN 33 600 478 402

Principal Certifying Authority - Steve Watson & Partners



Project Contacts

Client:	Essence Project Management Pty. Ltd.
Architect:	PTW

Revision History

Revision No:	Date:	Revision Details:	Author:	Verifier:
R1.0	Friday, 5 April 2024	Draft Report – for review	Josh Harvey	Jarryd Beckman
R1.1	Thursday, 16 May 2024	Final Report – DA Lodgment	Josh Harvey	Jarryd Beckman

Disclaimer:

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

This report is based on a review of the design documentation only. It represents a compliance report for “documentation to this point in time” and will be subject to amendment and expansion as project documentation develops



Executive Summary

An assessment of the design of the proposed design of the project at 83-99 North Terrace, Bankstown also known as Barings Compass Centre as has been undertaken against the Deemed-to-Satisfy (DTS) provisions of the relevant sections of the Building Code of Australia and the applicable Building Regulations.

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

Summary of BCA Parameters:

Building Use:	Residential, Hotel, Office, Retail, Carpark, Storage, Childcare, Assembly Building (gym)
Class of Occupancy	Class 2,3 5, 6 7a,7b & 9b
Type of Construction Required	Type A
Rise Storeys:	Twenty-six (26)
Number of Storeys:	Twenty-seven (27)
Effective Height:	85.75m (Roof RL 103.55 – Basement 01 RL 17.8)



1. Performance solutions required.

It is proposed to satisfy the following non-compliances via performance solutions:

Item	Non-Compliance	DTS Clause	Description
1.	Type of construction required Type A Construction	C2D2,C3D9, C3D10	Rationalise the FRL's within the following locations; • Basement 01 Loading dock • Storage cages within basement level carpark • Retail FRL Level 1 & 3
2.	Enclosure of shafts	S5C8	It is proposed to have a waste chute discharge within a bin room therefore, the bottom of the shaft will not be enclosed with fire rated construction as required by Specification 5.
3.	Class 9 buildings	C3D6	The Childcare is connected to the reminder of the building by a series of over hangs and awnings. It is technically not separated from the reminder of the building via a fire wall as the wall separating the tenancy from the awning contains window openings.
4.	Separation of equipment /Special Hazards	C3D13, E1D17 & E2D21	EV charging stations are proposed to be installed within the carparking area. At this stage it is assumed the EV charging stations will contain 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. The installation of EV charging stations will be addressed as an Excessive Hazard via BCA Clause ED13 & E2D21 provisions for special hazards.
5.	Public corridors in Class 2 & 3 buildings	C3D15	The public corridors exceed 40m in length in the Class 2 parts of the building, it is proposed to vary the requirements of C3D15 via Fire Engineering Performance Solution
6.	Separation of external walls and associated openings in different fire compartments	C4D4	There are multiple openings within the external wall in different compartments where the method of protection to the openings will vary from the requirements of BCA Clause C4D4.
7.	Bounding construction: Class 2 and 3 buildings and Class 4 parts	C4D12	The common areas of the Class 3 hotel will not be provided with bounding construction as required by BCA Clause C4D12.
8.	Number of exits required	D2D3	Mezzanine level of basement 01 is provided with a single exit in lieu of two exits.
9.	Exit travel distances	D2D5	The following areas have been identified with distances exceeding 20m to a point of choice: • Basement 02 – Up to 35m • Basement 01 – Up to 34m • Level 01 – up to 29m • Level 02 – up to 50m • Level 03 – up to 40m • Level 04 – up to 29m • Level 05 – up to 17m (resi) • Level 06 – 23 – up to 14 m • Roof Level- up to 42m (Building C) The following areas have been identified with exit travel distances exceeding 40m:



Item	Non-Compliance	DTS Clause	Description
			- Basement 02 – Up to 64m - Basement 01 – Up to 49m - Ground Level – up to 47m - Level 02 (Landscape area) – up to 65m - Level 02 (resi-communal) – up to 33 m - Level 03 – up to 49m
10.	Distance between alternative exits	D2D6	The following areas have been identified with distances between alternative exits exceeding 60m: - Basement 02 – Up to 110m - Basement 01 – Up to 123m - Level 01 – up to 70m - Level 02 – up to 83m - Level 03 – up to 80m - Level 05- Up to 64m Distance between alternate exits appears to be excessive in some instance and further design development including discussion with the Fire Engineer shall be undertaken. Furthermore, there are various locations where the “scissor stairs” are not located greater than 9m apart.
11.	Travel via fire isolated stairs	D2D12	BC-FS03 is technically required to be pressurised as there are more than three (3) entries within the same story. Pressurisation will be omitted via Performance Solution.
12.	Travel by non-fire-isolated stairways or ramps	D2D14	The non-fire isolated stair serving Level 02 landscaped area exceeds 60m to road or open space and discharges greater than 30m for one of two doorways leading to road or open space.
13.	Discharge from exits	D2D15	Alternate exits serving as a required exit (all fire isolated stairs) do not discharge as far apart as practical.
14.	Thresholds	D3D16	Many of the fire stairs will discharge into the public lobby of the Building A-C. As a result of the building being within a flood hazard area, a step will be incorporated within the threshold of the doorway. (BCA Performance Solution)
15.	Swinging doors	D3D25	Within the retail components on ground there are various locations where the exit doors serve areas which exceed 200m ² and do not swing in the direction of travel.
16.	Fire hydrants	E1D2	The following non-compliances have been identified in relation to the hydrant system; Booster location being not within sight of all entries to the building.
17.	Fire control centre	E1D15	The fire control room is located greater than 300mm from street level
18.	Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings	E2D6	The building is technically required to be provided with a zone pressurisation system between vertically separated fire compartments in accordance with BCA Clause E2D6.
19.	Travel via fire-isolated exits	D2D12	A Performance Solution is required to address fire isolated stairs; Discharging within the confines of the building



Item	Non-Compliance	DTS Clause	Description
			Requiring occupants discharging past unprotected openings in the external wall. A Fire Engineer is to assess the feasibility of a Performance Solution to address variations to the DtS requirements.

The design is capable of complying with the requirements of the relevant sections of the Environmental Planning Assessment Act 1979, the Environmental Planning and Assessment Regulations 2021 and the Building Code of Australia 2022. Compliance is subject to resolution of the identified areas of non-compliance and compliance with the recommendations provided within the report.

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

Whilst not precluding the issue of a Construction Certificate, it is noted that many detailed design issues are not indicated on the drawings. These issues are designated “Compliance Readily Achievable” in the “*Status*” column of the assessment in Section 13 of the report and should be resolved prior to construction.



CONTENTS

PROJECT CONTACTS	2
REVISION HISTORY	2
1.1. PERFORMANCE SOLUTIONS REQUIRED.	4
GLOSSARY	8
2. INTRODUCTION	9
3. PURPOSE	11
4. SCOPE AND LIMITATIONS	11
4.1. SCOPE	11
4.2. LIMITATIONS	11
4.3. CERTIFICATION WORKS	11
5. NATIONAL CONSTRUCTION CODE BCA 2022- VOLUME 1: BUILDING CODE OF AUSTRALIA CLASS 2 TO CLASS 9 BUILDINGS	12
6. PERFORMANCE SOLUTIONS	12
7. STATUTORY FRAMEWORK	12
7.1. NEW WORK	12
7.2. RESIDENTIAL FLAT DEVELOPMENT	13
7.3. FULFILMENT OF BASIX COMMITMENTS	13
8. METHODOLOGY	13
8.1. PROCESS ADOPTED	13
9. ASSESSMENT DATA SUMMARY	14
9.1. ASSUMPTIONS	14
9.2. INTERPRETATIONS	14
10. RELEVANT AUTHORITIES	14
11. STATUTORY FIRE SAFETY MEASURES	14
12. CONCLUSION	14
13. BCA 2022 - CLAUSE BY CLAUSE ASSESSMENT	15
14. APPENDIX A - REFERENCED DOCUMENTATION	61
15. APPENDIX B - STATUTORY FIRE SAFETY MEASURES	62
16. APPENDIX C2D2 - FIRE RATING REQUIREMENTS	64
16.1. TYPE A CONSTRUCTION	64
17. APPENDIX C2D10 - NON-COMBUSTIBLE BUILDING ELEMENTS	66
18. APPENDIX C2D11 - EARLY FIRE HAZARD PROPERTIES FOR MATERIALS	68
19. APPENDIX D3D29 - PROTECTION OF OPENABLE WINDOWS	69



GLOSSARY

Building Code of Australia - BCA, National Construction Code - NCC

Deemed-to-Satisfy - DTS

Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 - EPAR (DCFS)

Environmental Planning and Assessment Act 1979 No 203 - EPAA

Environmental Planning and Assessment Regulation 2021 - EPAR



2. Introduction

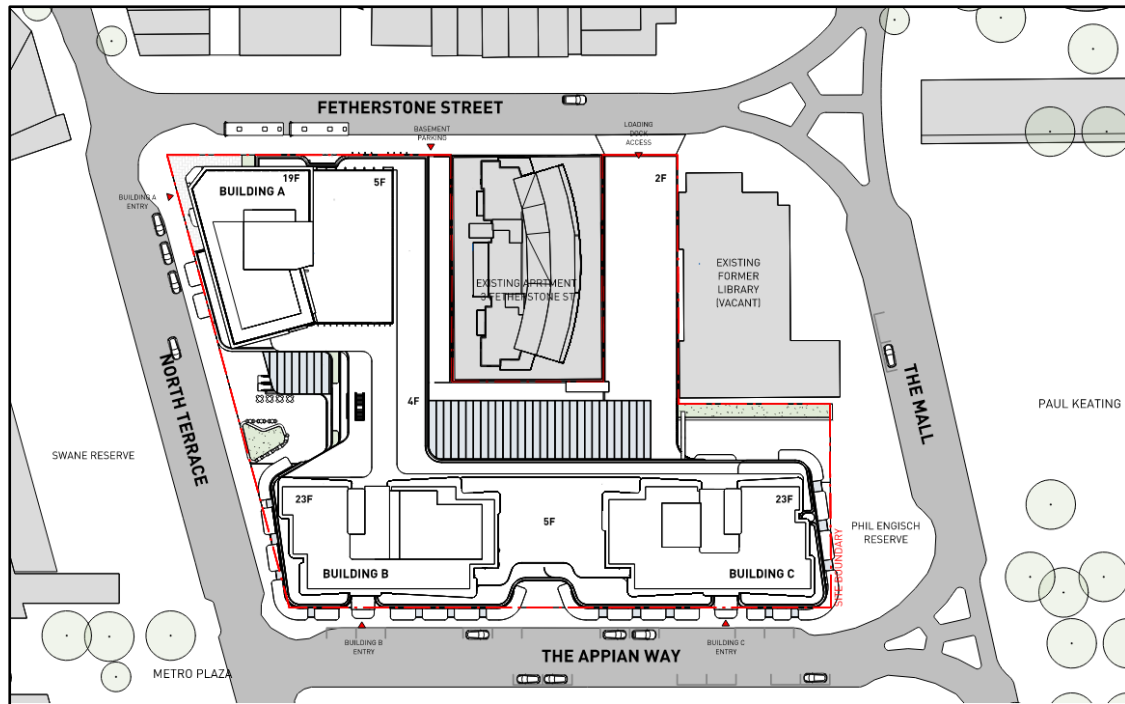
This report presents the findings of a preliminary assessment undertaken of the proposed design of the mixed-use development at 83-99 North Terrace Bankstown also known as Barings Compass Centre against the Deemed-to-Satisfy (DtS) provisions of Building Code of Australia BCA 2022.

The site is located at 83-99 North Terrace, Bankstown within the City of Canterbury Bankstown local government area (LGA). It is located to the north of Bankstown railway station, to the south of Paul Keating Park and forms part of the street block bounded by The Mall (north), The Appian Way (east), North Terrace (south), and Fetherstone Street (west), however does not comprise a street frontage to The Mall, given that its northern boundary interfaces with the former Bankstown City Library site and Phil Engisch Reserve.

This DA seeks approval for Construction and use of a five (5) storey mixed use podium and three towers, comprising:

- a 19-storey hotel tower in the south-west corner of the site;
- a 24-storey residential tower in the south-east corner of the site;
- a 24-storey residential tower in the north-east corner of the site;
- ground floor retail activating the ground plane;
- a gym at the southeastern corner of levels 1 and 2;
- a metro supermarket at the west of level 1;
- provision of common residential amenity spaces at the north of levels 2 to 3;
- a childcare use at the North eastern corner of the podium rooftop;
- ancillary uses associated with the hotel in the hotel tower's podium rooftop;
- medical centre uses in the southeast tower's podium rooftop;
- provision of a through site link connecting The Mall in the north to North Terrace in the South, as well as additional links from Fetherstone Street and The Appian Way, providing connections to both The Mall and North Terrace; and
- Car parking on levels 1, 2 and 3 of the podium, which are to be appropriately sleeved through façade activation, active uses, landscaping and active mezzanine floors.
- Construction and use of a two (2) level basement car park accommodating car, bicycle, motorcycle and loading spaces.
- Vehicular access from Fetherstone Street to the West of the site.
- Inclusion of landscaping throughout the site.

Pedestrian access is provided North Terrace, The Mall, The Appian Way and Fetherstone street, whilst vehicular access is provided to and from the building on Fetherstone Street.



Site plan Courtesy of PTW

This report has been prepared by Steve Watson and Partners for Essence Project Management Pty. Ltd.



3. Purpose

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

The assessment is undertaken for the purpose of, and to the extent necessary for, Development Consent to be issued under Part 4 of the NSW Environmental Planning and Assessment Act 1979 No 203 and Environmental Planning and Assessment Regulation 2021.

4. Scope and Limitations

4.0. Scope

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

4.1. Limitations

The following limitations apply to the assessment:

- The report considers matters of a significant nature only and should not be considered exhaustive.
- The plans are assessed to the extent necessary to issue a Construction Certificate under Part 6 of The Act. This means the design has been assessed to be capable of complying with the BCA without necessarily having all the detailed design completed at this stage.
- Details in regard to access for people with disabilities have been assessed to the extent of the deemed-to-satisfy provisions of the BCA/Premises Standard only. A detailed assessment against AS 1428 series, AS/NZS 2890.6 - 2009 and AS 4299 - 1995 is outside the scope of this report
- Generally, the assessment does not incorporate a detailed assessment of the requirements of the Australian Standards.
- Structural and services documentation have not been reviewed.
- Appraisals are limited to the provisions of the BCA and the Premises Standards. Other legislative requirements have not been considered. It does not address additional or specific requirements stipulated under other areas such as Safety in Design, Construction Safety, Disability Discrimination, Planning and Environment, Occupational Health and Safety, Health, Dangerous Goods, etc, which may impact on the design and use of the building. It is recommended that appropriate advice from suitably qualified consultants should be obtained for further information on these areas
- The BCA report and associated compliance advice is not intended or permitted to be relied on by any other party with respect to their obligations to ensure compliance including but not limited to the making of a compliance declaration under the NSW Design and Building Professionals Act.

4.2. Certification Works

This report is provided as part of SWP's contracted scope for this project, which is "Certification Work", as defined in the Building and Development Certifiers Regulation 2020. Due to the strict requirements and limits in terms of conflicts of interest imposed under that regulation, SWP cannot undertake any services other than Certification Work services on this project. Hence, the contents of this report, and any associated correspondence, are provided in the context of a preliminary certification assessment of plans, and may not be construed to constitute involvement in building design, the preparation of plans and specifications, the provision of advice on how to amend a plan or specification to ensure that the aspect



will comply with legislative or code requirements, or to breach any other restriction or limitation imposed under the conflict of interest provisions of that or any other legislation.

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

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

6. Performance Solutions

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

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

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

7. Statutory Framework

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

Issue	Legislative reference	Comment
New Work	EPAR (DCFS) S19	All new works must comply
Residential Flat Development	EPAR (DCFS) S15 & S43	Statement from a qualified designer verifying compliance with State Environmental Planning Policy (Housing) 2021 for residential developments
BASIX	EPAR (DCFS) S10	BASIX certificate required for residential projects

7.0. New Work

Section 19 of the EPAR (DCFS) requires that all new work comply with the current requirements of the BCA. This means that all works proposed in the plans are required to comply but that existing features of an existing building need not comply with the BCA unless required to under other clauses of the legislation.



7.1. Residential flat development

Section 15 of the EPAR (DCFS) requires a qualified designer to provide a statement that verifies that the plans and specifications achieve or improve the design quality of the development having regard to the design quality principles set out in Part 2 of the *State Environmental Planning Policy (Housing) 2021* prior to the issue of a Construction Certificate. Section 43 of the EPAR (DCFS) requires a qualified designer to provide a statement that verifies that the residential flat development achieves the design quality of the development as shown in the plans and specifications having regard to the design quality principles set out in with Schedule 9 of the *State Environmental Planning Policy (Housing) 2021* prior to issuing an Occupation Certificate.

7.2. Fulfilment of BASIX Commitments

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

8. Methodology

8.0. Process adopted

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

- 1) Determine the basic assessment data for the building.
- 2) Assess the design of the building against the current Deemed-to-Satisfy requirements of Sections B, C, D, E, F, G, H and J of the BCA. Establish the status of each clause into the following categories:
 - a. Clause is administrative information only (**Noted**);
 - b. Clause is or is not relevant to the proposed work (**Applicable or N/A**)
 - c. The proposed work complies with the requirements of the clause (**Complies**);
 - d. Compliance with the requirements of the clause is unable to be determined from the documentation provided (**Compliance Readily Achievable**). A recommendation in the “Comments” column will indicate what is required to achieve compliance. The design and construction teams are responsible to ensure compliance is achieved;
 - e. Compliance with the requirements of the clause is unable to be determined from the documentation provided. Additional details or relevant information required to verify compliance (**Additional Details Required**);
 - f. Proposed work does not comply with the requirements of the clause (**Does Not Comply**). An indication will be given in the Comments field as to the nature of the issue and whether a performance solution has been proposed to address the issue;
 - g. Proposed work is to be addressed on a performance basis via a Performance Solution satisfying the relevant Performance Requirements. (**Performance Solution**);
- 3) Nominate the status of the design against each BCA requirement;
- 4) Provide comments against each BCA requirement as appropriate.



9. Assessment Data Summary

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

9.0. Assumptions

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

1. Five (5%) of the total retail population is assumed to be staff.
2. For the purposes of calculating population and minimum sanitary facilities under Clauses D2D18 and F4D4 of the BCA, twenty percent (20%) of the total retail floor area of tenancies will consist of permanent fixtures, fixed shelving, racking and the like.
3. Metro store and Active use areas (1 & 2) will be expected to provide sanitary facilities as part of the tenancy fit out works.
4. The Function Rooms and Bar of the hotel are considered to be public in nature and therefore attract a Class 9b BCA Classification
5. Medical Suite on level 4 has been considered consulting only and has been determined as Class 5 in lieu of 9a
6. Childcare will be a cold shell, tenancy fit out works will need to demonstrate compliance with the requirements of the BCA, other than base building matters addressed via the base building Fire Engineering Performance Solution.

9.1. Interpretations

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

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

10. Relevant Authorities

Consultation with the Fire Commissioner is required under Section 26 and 27 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 for performance-based design briefs and performance solutions prepared for a fire safety requirement if:

- (a) the building is a class 2, 3, 4, 5, 6, 7, 8 or 9 building, and
- (b) a construction certificate is required for the building work comprising the performance solution.

11. Statutory Fire Safety Measures

All fire/essential safety measures installed within the building are required to be certified upon completion of the project and prior to occupation of the building by the owner of the building, by issuing a Final Fire Safety Certificate under the Act.

The owner is also required under the Act to certify each of the Fire Safety Measures annually by issuing a Fire Safety Statement. With performance solutions, additional or more frequent maintenance may result.

12. Conclusion

The design is capable of complying with the requirements of the relevant sections of the of the Act and EPAR (DCFS) 2021, EPAR 2021 and the BCA 2022 subject to resolution of the identified areas of non-compliance and compliance with the recommendations provided within the report. Further detailed regulatory reviews will need to be progressively undertaken as designs advance and become more resolved to ensure compliance is achieved.

13. BCA 2022 - Clause by Clause Assessment

Clause	Description	Comment			Status															
BCA Version																				
BCA 2022	BCA version The BCA is generally updated every 3 years with amendments influencing health, safety and amenity features required within the building. Legislation typically allows future BCA changes to be ignored provided substantial progress on the design of the development has previously occurred.	This report assumes that the applicable BCA version is BCA 2022. In addition, requirements of the Premises Standards (PS) are covered as relevant. NCC 2022 uses a new structure and clause referencing system. This system is called Section-Part-Type-Clause (SPTC). An example of the (SPTC) referencing system is expanded upon below: <table><tr><th>Ref</th><th colspan="2">Description</th></tr><tr><td>Section</td><td colspan="2"> Refers to the applicable section of the NCC. e.g., <i>Section D - Access and egress</i> Section lettering will mostly stay as per previous editions of the National Construction Code. </td></tr><tr><td>Part</td><td colspan="2"> Part identifies the part of the applicable section. e.g., Part D2 - Provisions for escape. </td></tr><tr><td>Type</td><td colspan="2"> Type refers to the type of Clause: O - Objective F - Functional Statement P - Performance Requirement V - Verification Method D - Deemed-to-Satisfy C - Specification G - Governing Requirements </td></tr><tr><td>Clause</td><td colspan="2"> Clause refers to the number within the Type group. </td></tr></table>			Ref	Description		Section	Refers to the applicable section of the NCC. e.g., <i>Section D - Access and egress</i> Section lettering will mostly stay as per previous editions of the National Construction Code.		Part	Part identifies the part of the applicable section. e.g., Part D2 - Provisions for escape.		Type	Type refers to the type of Clause: O - Objective F - Functional Statement P - Performance Requirement V - Verification Method D - Deemed-to-Satisfy C - Specification G - Governing Requirements		Clause	Clause refers to the number within the Type group.		Compliance Readily Achievable
					Ref	Description														
					Section	Refers to the applicable section of the NCC. e.g., <i>Section D - Access and egress</i> Section lettering will mostly stay as per previous editions of the National Construction Code.														
					Part	Part identifies the part of the applicable section. e.g., Part D2 - Provisions for escape.														
					Type	Type refers to the type of Clause: O - Objective F - Functional Statement P - Performance Requirement V - Verification Method D - Deemed-to-Satisfy C - Specification G - Governing Requirements														
					Clause	Clause refers to the number within the Type group.														
Section A: General Provisions																				
A5G3	Suitability of materials Every part of a building must be constructed in an appropriate manner to achieve the requirements of the BCA, using materials that are fit for the purpose for which they are intended.	The builder is responsible to adopt and install appropriate proprietary accredited building products and is to ensure that those products/assemblies are fit for the purpose they are intended and are installed in accordance with the manufacturer’s specifications/ requirements for that system.			Compliance Readily Achievable															
Part A6	Classification and usage Usage on each level of the building is as follows:	LEVEL Basement 02	USE Carpark Storage	CLASS 7a & 7b																

Clause	Description	Comment	Status
		Basement 01 Carpark Storage 7a & 7b Loading Dock Ground Retail 6 Level 01 Retail 6, 7a Carpark & 9b Assembly building (Active use) Level 02 Residential, Office, Carpark & Assembly (Active use) 2, 5, 7a & 9b Level 03 Residential & Carpark 2 & 7a Level 04 Hotel, Office (medical suite) & Childcare 3, 5 & 9b Level 05 Residential Assembly 2 & 9b Level 06-19 Residential Hotel 2 & 3 Level 20-Roof Residential 2	
Part A7	United buildings Buildings are deemed united when two or more buildings adjoining each other are connected and used as one building.	All buildings on the allotment are connected via basement level carpark. Therefore, the development is considered a <i>united building</i> .	Noted
Section B: Structure			
B1D2	Resistance to actions The resistance of the building must be greater than the most critical action effect resulting from different combinations of actions	Certification from a qualified Structural Engineer is to provide at Construction Certificate stage.	Compliance Readily Achievable
B1D3	Determination of individual actions The magnitude of individual actions must be determined in accordance with Clause B1D3 of the BCA.	Certification from a qualified Structural Engineer is to provide at Construction Certificate stage.	Compliance Readily Achievable
B1D4	Determination of structural resistance of materials and forms of construction The structural resistance of materials and forms of construction must be determined in accordance with the relevant Australian Standards in accordance with Clause B1D4 of the BCA.	Certification from a qualified Structural Engineer is to provide at Construction Certificate stage.	Compliance Readily Achievable
B1D5	Structural software Structural software used in computer aided design of a building or structure that uses design criteria based on DTS provisions of the BCA must comply	Certification from a qualified Structural Engineer is to provide at Construction Certificate stage.	Compliance Readily Achievable

Clause	Description	Comment	Status
	with the ABCB Protocol for Structural Software.		
B1D6	Construction of buildings in flood hazard areas A Class 2, 3, 4, 9a or 9c building located in a flood hazard area must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas.	It is understood that the development is located within a flood hazard area. Further details are to be provided at CC stage demonstrating compliance with ABCB Standard for Construction of Buildings in Flood Hazard Areas.	Compliance Readily Achievable
Section C: Fire Resistance			
Part C2 - Fire Resistance and Stability			
C2D2	Type of construction required Type A Construction BCA Type A fire resisting construction is required. Refer to Appendix Specification 5 for the required FRLs for each building element.	The building in its entirety shall be constructed in Type A construction in its entirety. Details of the proposed construction and how it will achieve the required FRL is to be provided. Certification from a Structural Engineer will be required for FRL's of all structural elements. Details of the proposed method of fire separation at the junction of floors and the external wall and the junction of fire rated internal walls and the external wall are needed for review at Construction Certificate stage, it is proposed to address the fire rating at the slab edge/façade and the slab edge and fire rated walls via Fire Engineering Performance Solution Residential levels shall be fire separated from one another to achieve FRL 90/90/90. Large-scale sections illustrating how lightweight fire rated construction encloses the top of shafts or how the shafts extend beyond the roof covering per this clause are needed for review. Concessions may be applied to the building whereby; The roof need not be provided with an FRL.	Compliance Readily Achievable

Clause	Description	Comment	Status
		Basement 01 contains a Loading dock which is required to be fire separated from the remainder of the building to achieve FRL 240, however, it is proposed to provide reduced FRL's for elements bounding the loading dock. Furthermore, it is proposed to rationalise the FRL's within the following locations; • Basement 01 Loading dock • Storage cages within basement level carpark • Retail FRL Level 1 & 3	Performance Solution
C2D3	Calculation of rise in storeys Effective Height / Calculation of rise in storeys. Rise in storeys is a defined BCA term addressing the number of main building levels excluding basements. Effective height is defined under the BCA as vertical distance between the floor of the lowest storey included in the calculation of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units). These parameters influence the BCA provisions applicable to the building.	The following parameters apply: Building Use: Residential, Hotel, Office, Retail, Carpark, Storage, Child Care, Assembly Building (gym) Rise Storeys: Twenty-six (26) Number of Storeys: Twenty-seven (28) Effective Height: 85.75m (Roof RL 103.55 – Basement 01 RL 17.8)	Noted
C2D4	Buildings of multiple classification	The building is required to be constructed of Type A fire resisting construction as the classification of the top storey is a Class 2.	Noted
C2D5	Mixed types of construction	N/A – The building in its entirety will be constructed in Type A Construction.	N/A
C2D6	Two storey Class 2, 3 or 9c buildings	N/A – The building in its entirety will be constructed in Type A Construction.	N/A
C2D7	Class 4 parts of buildings	N/A	N/A
C2D8	Open spectator stands and indoor sports stadiums	N/A	N/A
C2D9	Lightweight construction Lightweight construction used in a wall system must comply with Specification 6 - Structural tests for lightweight construction. Lightweight construction used as a fire-resisting covering of a steel column or the like, and where the covering is not in continuous contact with the column must have the voids filled to a height of not less than 1.2m above the floor and where the column is liable to be damaged must be protected by steel or other suitable material.	Fire rated wall types must match a tested prototype. Product codes should be noted on the wall type schedule and corresponding test reports provided for review. It is recommended a third-party passive fire consultant review the use of lightweight construction details where used in a fire rating application.	Compliance Readily Achievable

Clause	Description	Comment	Status
C2D10	Non-combustible building elements In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: - External walls and common walls, including all components incorporated within them including façade covering, framing and insulation; - The flooring and floor framing of lift pits; - Non-loadbearing internal walls where they are required to be fire-resisting; - Non-loadbearing shaft being a lift, ventilating, garbage or similar shaft. The following materials may be used where non-combustible materials are required:- - Plasterboard. - Perforated gypsum. - Fibrous-plaster sheeting to AS 2185. - Fibre-reinforced cement sheeting. - Pre-finished metal sheeting having a combustible surface finish not exceeding 1mm thickness and where the spread-of-flame index of the product is not greater than 0. - Sarking-type materials that do not exceed 1mm thickness and have a flammability index not greater than 5. - Bonded laminated materials where each lamina, including any core, is not combustible and each adhesive layer does not exceed 1mm thickness and the total thickness of the adhesive layers does not exceed 2mm and the spread of flame index and smoke development index of the bonded laminated material as a whole do not exceed 0 and 3 respectively and when located externally, are fixed in accordance with C2D15. - Any product as determined by testing to AS 1530.1 - An appropriately BCA accredited product or system	The Architect and Structural Engineer are to make provisions for this requirement in the design. A detailed review of the external cladding must be undertaken to ensure that there are no combustible materials and non-complaint claddings have not been nominated that could increase the risk of fire spread via the external façade. An architectural specification detailing the components of the external walls and their fire properties are needed for review including corresponding test reports verifying compliance with this clause. Ensure all façade materials have a current Certificate of Conformity or a current Certificate of Accreditation, or the like to determine their acceptance by the Fire Safety Engineer and Fire Brigade. Please refer to Spec C2D10 for further details.	Compliance Readily Achievable
C2D11	Fire hazard properties <i>(NSW variation for Entertainment Venues)</i> Floor materials, floor coverings and wall and ceiling lining materials need to comply with prescribed fire hazard properties. Refer to Appendix C2D11 & compliance with AS5637.1-2015.	Compliance assumed and will require verification test data for all timber and other combustible linings and materials, including: - Carpets - Vinyls (walling and flooring) - Timber flooring and wall linings - Veneered wall panelling - Spray-on insulation material - Other combustible finishes - Carpark soffit insulation fire test	Compliance Readily Achievable

Clause	Description	Comment	Status
		reports, based on 'room fire testing' will be required to meet fire brigade consent conditions if applicable. A schedule of internal finishes and corresponding fire hazard test data for all combustible internal linings are needed for review.	
C2D12	Performance of external walls in fire	N/A – The Building has a rise in storeys of more than two (2).	N/A
C2D13	Fire-protected timber: Concession	N/A	N/A
C2D14	Ancillary elements An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is non-combustible or is otherwise permitted under this clause.	At this stage, details of ancillary items that may be attached to the external wall have not been provided. In particular details should be provided for the following; - Awning, sunshade, canopy, blind or shading hood - signage fixed to the external wall. Further assessment of the Construction Certificate documentation is required.	Compliance Readily Achievable
C2D15	Fixing of bonded laminated cladding panels In a building required to be of Type A or B construction, externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame.	Sufficient details have not been provided at this stage externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame in accordance with C2D15. Further details are to be provided at CC stage for assessment.	Compliance Readily Achievable
Part C3 - Compartmentation and Separation			
C3D2	Application of Part	Clauses C3D3, C3D4 and C3D5 do not apply to a sprinkler protected carpark, an open deck carpark or an open spectator stand.	Noted
C3D3	General floor area and volume limitations (Type A construction) The floor area and volume limitations are: Class 5 & 9b : 8,000m ² and 48,000m ³ Class 6,& 7: 5,000m ² and 30,000m ³ Note: - The BCA does not require Class 2 and 3 parts of the building to be considered. - The basement carpark levels are not required to be considered as they are provided with a sprinkler system throughout.	As a result of the Ground Floor retail tenancies being connected via awnings or building overhang, with no fire separation between the various tenancies, these are technically a single fire compartment. Furthermore, Ground and Level one is connected by a series of openings which constitutes Ground Level and Level One constitute a single fire compartment. The building will proposed exceed the prescriptive requirements for the maximum floor area for a Building a Type A Construction and will be assessed as a large isolated building as per BCA Clause C3D4.	Noted

Clause	Description	Comment	Status
C3D4	Large isolated buildings Where the building exceeds the limitations under Clause C3D3 above and neither exceeds 18,000m² nor 108,000m³ and is- Class 5, 6, 7, 8 or 9: • Sprinkler protected throughout; and • Has 6m wide perimeter vehicular access complying with Clause C3D5(2). Where the building exceeds 18,000m² or 108,000m³: • Sprinkler protection throughout; and • Has 6m wide perimeter vehicular access complying with Clause C3D5(2).	Refer to Clause E2D3 for smoke hazard management requirements.	Compliance Readily Achievable
C3D5	Requirements for open space and vehicular access Vehicular access / open space is required from the public road for emergency vehicle access and is not to be used for storage or processing of materials and must not be built upon except for guard houses and service structures that do not unduly impede firefighting. Vehicular access must have a loadbearing capacity and unobstructed height to permit the operation and passage of fire brigade vehicles. Vehicular access must be capable of providing <u>continuous</u> access for emergency vehicles to enable travel in a <u>forward</u> direction from the public road around the entire building.	At this stage of the design, compliance is readily achievable. However, the design of the public roads form part of separate application and the design of these may be outside the control of the applicant. Further assessment may be required as the design develops to ensure compliance with BCA Clause C3D5.	Compliance Readily Achievable
C3D6	Class 9 buildings Class 9b early childhood centres Unless it is the only use in the building or wholly within a storey that provides direct egress to a road or open space, walls having an FRL not less than that required for a fire wall must separate an early childhood centre from the remainder of the building. Additional fire compartmentation and egress provisions apply to buildings that exceed 500m² and do not meet the egress requirements of this clause, or where the early childhood centre is not wholly within a storey that provides direct egress to a road or open space.	The childcare is connected to the remainder of the building by a series of over hangs and awnings. It is technically not separated from the remainder of the building via a fire wall as the wall separating the tenancy from the awning contains window openings. A Fire Engineer will be engaged to address variations with BCA Clause C3D6 at CC stage. The Childcare is proposed to be a cold shell. The design of the compartments within the tenancy will subject to a later Development Application.	Performance Solution
C3D7	Vertical separation of openings in external walls	N/A – The building will be provided with a sprinkler system in accordance with AS2118.6-2012.	Compliance Readily Achievable
C3D8	Separation by fire walls A fire wall must extend to the underside of a floor having an FRL required for a fire wall or the roof covering.	It is proposed to separate fire compartments and building classifications via a Fire Wall. Fire walls separating classifications shall extend to the underside of— a floor having an FRL required for a fire wall; or	Noted

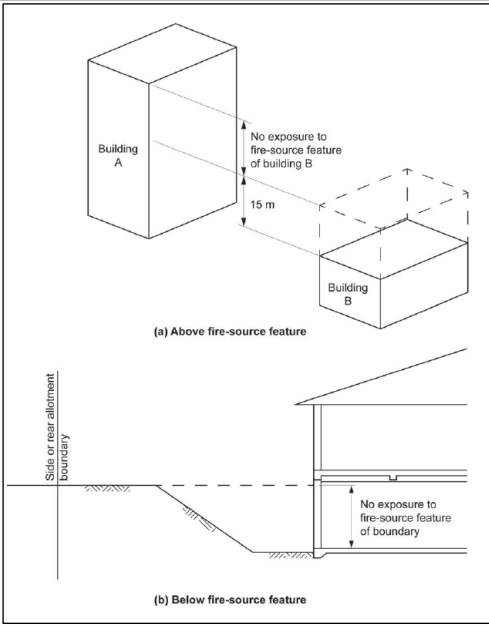
Clause	Description	Comment	Status
		b) the roof covering. Please refer to BCA Clause C3D9 for further details	
C3D9	Separation of classifications in the same storey As the building has parts of different classifications located alongside one another in the same storey, each building element must have the higher FRL prescribed in Specification 5 of the BCA or the parts must be separated by a fire wall.	There are multiple locations whereby different classifications are located adjoining one another. Fire walls separating compartments are required to have the FRL prescribed in accordance with Specification 5 as applicable for that element for the Type of construction and the classifications concerned. Architectural drawings, including compartmentation drawings are to be submitted demonstrating compliance with the requirements of C3D9.	Compliance Readily Achievable
		As discussed previously within this report it is proposed to rationalise the FRL's within the following locations; • storage cages within carpark • Rationalise the FRL's on Level 01- 04 to FRL 120 across the retail classifications	Performance Solution
C3D10	Separation of classifications in different storeys As different classifications are situated one above the other in adjoining storeys they must be separated in accordance with the DTS provisions of the BCA.	Basement Level 01 contains a Loading dock which is required to be fire separated from the remainder of the building to achieve FRL 240, however, it is proposed rationalise the fire separation between the adjoining fire compartments, therefore, this will also apply to the slab separating Basement Level 1 and Ground Floor. Additionally, the retail component will need to be separated from the residential component on Level 5 via FRL 120. Furthermore, it is proposed to rationalise the construction across level 01-03 to FRL 120. Subject to assessment from Fire Engineer.	Performance Solution
C3D11	Separation of lift shafts Openings for lift landing doors and services must be protected in accordance with the DTS provisions of Part C4 of the BCA.	It is assumed that the building can readily comply. Lift shafts are required to contain the same FRL as required FRL for the Classification within the story. Any emergency lifts must be contained within a fire-resisting shaft having an FRL of not less than 120/120/120. Detailed architectural drawings including fire compartment/FRL drawings are to be submitted for further assessment.	Compliance Readily Achievable

Clause	Description	Comment	Status
C3D12	Stairways and lifts in one shaft	The current configuration is such that the stairway and lift shafts are contained in separate shafts thereby complying with the requirements of this clause.	Complies
C3D13	Separation of equipment 2hr fire separation is required for: - Lift motor rooms. - Emergency generators sustaining emergency equipment operating in emergency mode. - Central mechanical smoke control plant. - Boilers. - A battery system installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more.	EV charging stations are proposed to be installed within the carparking area. At this stage it is assumed the EV charging stations will contain 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. The installation of EV charging stations will be addressed as an Excessive Hazard via BCA Clause ED13 & E2D21 provisions for special hazards. A separate hazard assessment is to be undertaken by a Fire Engineer.	Performance Solution
C3D14	Electricity supply system A substation located within a building or main switchboard that sustains emergency equipment must be separated from the remainder of the building by 2hr fire rated construction. Switchboards sustaining emergency equipment must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of faults.	The substation is located adjoining Fetherstone Street. The substation shall be provided with a minimum FRL 240 to fire separate the area from the loading dock. Compartment drawings and plans specifically noting wall types and the FRL requirements are to be provided for further assessment.	Compliance Readily Achievable
C3D15	Public corridors in Class 2 & 3 buildings Public corridors must be divided at intervals of not more than 40m by smoke-proof walls complying with S11C2.	The public corridors exceed 40m in length in the Class 2 parts of the building. Fire Engineer to assess variations to the DtS requirements via Performance Solution.	Performance Solution
Part C4 - Protection of Openings			
C4D2	Application of Part	Noted	Noted
C4D3	Protection of openings in external walls Openings in the external walls of the building are to be protected in accordance with C4D5, being fire rated windows, external sprinklers or the like, if they are: - Less than 3m to side or rear boundary, - Less than 6m from the far boundary of a road or lane, - Less than 6m from another building on the same allotment. - Openings that require protection should not occupy more than $\frac{1}{3}$ of the external wall of the storey in which it is located.	There are openings located within 3m of a fire source feature which are required to be protected in accordance with C4D5. The door opening to the fire stair adjoining the allotment boundary of 3-7 Featherstone Street is required to be provided with a -/60/30 fire door.	Compliance Readily Achievable

Clause	Description	Comment	Status														
C4D4	Separation of external walls and associated openings in different fire compartments External walls within the distances specified in Table C4D4 of the BCA are to be protected by construction with an FRL not less than 60/60/60 and the associated openings protected in accordance with Clause C4D5 of the BCA. <table><tr><th>Angle between walls</th><th>Min. Distance</th></tr><tr><td>0° (walls opposite)</td><td>6 m</td></tr><tr><td>more than 0° to 45°</td><td>5 m</td></tr><tr><td>more than 45° to 90°</td><td>4 m</td></tr><tr><td>more than 90° to 135°</td><td>3 m</td></tr><tr><td>more than 135° to less than 180°</td><td>2 m</td></tr><tr><td>180° or more</td><td>Nil</td></tr></table>	Angle between walls	Min. Distance	0° (walls opposite)	6 m	more than 0° to 45°	5 m	more than 45° to 90°	4 m	more than 90° to 135°	3 m	more than 135° to less than 180°	2 m	180° or more	Nil	There are multiple openings in the external walls of different compartments where the openings are required to be protected in accordance with C4D5, however, the Fire Engineer shall address variations to the DtS requirements via Fire Engineering Performance Solution	Performance Solution
Angle between walls	Min. Distance																
0° (walls opposite)	6 m																
more than 0° to 45°	5 m																
more than 45° to 90°	4 m																
more than 90° to 135°	3 m																
more than 135° to less than 180°	2 m																
180° or more	Nil																
C4D5	Acceptable method of protection	N/A – Please refer to comments above.	N/A														
C4D6	Doorways in fire walls Doorways in firewalls are to be protected by a fire door or fire shutter that has an FRL of not less than that required for the firewall except that the insulation rating must be at least 30.	Sufficient details have not been provided at this stage for assessment, however, compliance is readily achievable subject to a door schedule being submitted at CC stage for assessment.	Compliance Readily Achievable														
C4D7	Sliding fire doors	N/A – Sliding fire doors are not proposed at this stage.	N/A														
C4D8	Protection of doorways in horizontal exits Doorways in horizontal exits are to be protected by a fire door, which has an FRL of not less than that required for the firewall except that the insulation rating must be at least 30.	Sufficient details have not been provided at this stage for assessment. However, compliance is readily achievable subject to detailed design development and door schedules detailing the required FRL in accordance with BCA Clause C4D8. Further design development and input from Fire Engineer may be required whereby doors in firewalls that are subject to a Performance Solution for reduced FRL's may be required to facilitate egress into an adjoining fire compartment (horizontal exit).	Compliance Readily Achievable														
C4D9	Openings in fire-isolated exits -/60/30 self-closing fire doors are required to doorways providing access to fire isolated stairways. A window or other opening in the external wall of the fire isolated exit is to be protected in accordance with Clause C4D5 if it is within 6m of, and exposed to, a window or other opening in the wall of the same building.	Sufficient details have not been provided at this stage for assessment. However, compliance is readily achievable subject to detailed design development and door schedules detailing the required FRL in accordance with BCA Clause C4D9.	Compliance Readily Achievable														
C4D10	Service penetrations in fire-isolated exits Service penetrations other than electrical wiring for essential service installations, pressurisation ducts with an FRL of -/120/60, or water pipes for fire services are not permissible.	Service drawings have not been provided at this stage. It is assumed compliance can readily be achieved. Service contractors are to ensure that no services other than those associated with fire services are contained within	Compliance Readily Achievable														

Clause	Description	Comment	Status
		the fire isolated stairs.	
C4D11	Openings in fire-isolated lift shafts Openings in lift shafts are to be protected by -/60/- fire doors complying with AS1735.11. Lift indicator panels are to be backed by construction having an FRL of not less than -/60/60 if they exceed 35,000mm ² (175 X 200 mm).	Certification from the lift supplier or a lift specification noting compliance is needed for review.	Compliance Readily Achievable
C4D12	Bounding construction: Class 2 and 3 buildings and Class 4 parts <i>(NSW variation for Entertainment Venues)</i> Doorways opening to public corridors are to be protected with self-closing -/60/30 fire doors.	Sufficient details have not been provided at this stage for assessment, however, compliance is readily achievable subject to a door schedule being submitted at CC stage for assessment. Doors providing access from residential sole-occupancy units or rooms not contained within a residential sole occupancy unit are to be provide with - /60/30 self-closing fire doors in accordance with BCA Clause D4D12. The requirements of this clause are applicable to bin storage rooms located in the Class 2 public corridors as these are considered "rooms".	Compliance Readily Achievable
		The common areas of the Class 3 hotel will not be provided with bounding construction as required by BCA Clause C4D12. A Fire Engineer will be engaged at CC stage to address variations to the DtS requirements.	Performance Solution
C4D13	Openings in floors and ceilings for services Services passing through floors are to be placed within fire resisting shafts or in accordance with Clause C4D15.	Services penetrations of fire rated structures generally need to be fire-stopped and/or located in fire rated riser shafts. Openings in fire rated elements need to be fire resisting to maintain the function of the elements. A 3rd Party passive fire consultant is to be engaged to assess the requirements of BCA Clause C4D15 and C4D15.	Compliance Readily Achievable
C4D14	Openings in shafts In a building of Type A construction, an opening in a wall providing access to a ventilating, pipe, garbage, or other service shaft must be protected by: - If it is a sanitary compartment - a door or panel which together with its frame, is non-combustible or has an FRL of not less than - /30/30, or - A self-closing -/60/30 fire door or hopper, or - An access panel with an FRL of not less than - /60/30, or	A door schedule demonstrating protection to openings in shafts has not been provided at this stage. It is assumed the building can readily comply. Detailed architectural drawings, including door schedules and BCA specification are required to be submitted for further assessment at CC stage.	Compliance Readily Achievable

Clause	Description	Comment	Status
	If the shaft is a garbage shaft - a door or hopper of non-combustible construction.		
C4D15	Openings for service installations Services penetrations through a building element (other than an external wall or roof) that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, must comply with a tested system or Specification 13. Methods and materials used are to be identical to tested prototypes and in accordance with AS4072.1 and AS1530.4, and must achieve the required FRL or resistance to the incipient spread of fire or other specified method. Ventilation and air-conditioning systems are to be installed in accordance with AS/NZS 1668.1.	Services penetrations of fire rated structures generally need to be fire-stopped and/or located in fire rated riser shafts. Openings in fire rated elements need to be fire resisting to maintain the function of the elements. A 3rd party passive fire consultant is to be engaged to assess the requirements of BCA Clause C4D15 and C4D15.	Compliance Readily Achievable
C4D16	Construction Joints Construction joints in elements required to have a fire resistance with respect to integrity and insulation must be protected.	Construction joints are to be fire protected in a manner identical to a prototype tested in accordance with AS4072.1 and AS1530.4 to achieve the required FRL or must otherwise comply with the requirements of this clause.	Compliance Readily Achievable
C4D17	Columns protected with lightweight construction to achieve an FRL	Columns must be protected in accordance with the identical tested prototype. Product codes should be noted on architectural plans and corresponding test reports provided for review.	Compliance Readily Achievable
Specification 5 - Fire-resisting construction			
S5C1	Scope	-	Noted
S5C2	Exposure to fire-source features Shielding elements must have an FRL of not less than 30/-/-. Concessions apply for parts of external walls of another building 15m above the building concerned or if the exposed part is below the finished ground level at the property boundary.	Noted	Noted

Clause	Description	Comment	Status
	 (a) Above fire-source feature (b) Below fire-source feature		
S5C3	Fire protection for a support of another part Supporting elements must generally maintain required FRLs unless a concession is available under this clause.	Certification from a qualified Structural Engineer will need to be provided at Construction Certificate stage	Compliance Readily Achievable
S5C4	Lintels A lintel must generally maintain the FRL required for the part of the building in which it is situated unless it can otherwise comply with this clause.	Certification from a qualified Structural Engineer will need to be provided at Construction Certificate stage	Compliance Readily Achievable
S5C5	Method of attachment not to reduce the fire-resistance of building elements The method of attaching or installing a finish, lining, ancillary element or service installation to a building element must not reduce the fire-resistance of that element to below that required.	Certification from a qualified Structural Engineer will need to be provided at Construction Certificate stage	Compliance Readily Achievable
S5C6	General concessions (1) & (2) Concessions are applicable for some steel and timber columns in predominantly single storey buildings. (3) Concessions are available for non-combustible rooftop plant enclosures. (4) Curtain walls fully protected with external sprinklers do not require an FRL. (5) Concessions are applicable for balconies not more than 2 storeys above ground that are not the only path of travel toward an exit.	The following concessions apply; Structures on roofs — A non-combustible structure situated on a roof need not comply with the other provisions of this Specification if it only contains— a) lift motor equipment; or b) one or more of the following: i. Hot water or other water tanks. ii. Ventilating ductwork, ventilating fans and their motors. iii. Air-conditioning chillers. iv. Window cleaning equipment. v. Other service units	Noted

Clause	Description	Comment	Status
		that are non-combustible and do not contain flammable or combustible liquids or gases.	
S5C7	Mezzanine floors: Concession	N/A	N/A
S5C8	Enclosure of shafts Shafts required to have an FRL must be enclosed at the top and bottom by construction have an FRL not less than that required for the walls of the shaft. Shafts, other than one enclosing a fire isolated stairway or ramp, do not require an FRL at the top if the shaft extends beyond the roof covering.	Large-scale sections illustrating how lightweight fire rated construction encloses the top of shafts (fire isolated stairs/fire isolated lift shafts) or how the shafts extend beyond the roof covering per this clause are needed for review at CC stage. It is proposed to have a waste chute discharge within a bin room, therefore, the bottom of the shaft will not be enclosed with fire rated construction as required by Specification 5. A Fire Engineer shall be engaged at CC stage to assess the feasibility of a Performance Solution to vary the DtS requirements of the BCA.	Compliance Readily Achievable Performance Solution
S5C9	Carparks in Class 2 and 3 buildings	N/A	N/A
S5C10	Residential care building: Concession	N/A	N/A
S5C11	Type A fire-resisting construction – fire-resistance of building elements a) All elements must achieve the FRL specified in Table 3. b) Internal walls requiring an FRL must extend to the underside of the floor above, to the roof, or to the underside of a ceiling with resistance to the incipient spread of fire of not less than 60 minutes. c) Loadbearing internal walls (including shafts) and fire walls must be constructed from masonry, concrete or fire-protected timber that complies with this clause. d) The FRLs for external columns also apply to internal columns facing and within 1.5 of a window that is exposed to a fire source feature.	The junctions of fire rated walls and facade and the floor slabs and facade will not maintain the required FRL and are to be designed on a performance basis as currently there are no tested systems for cavity barriers which maintain an FRL. Details of the proposed method of fire separation at the junction of floors and the external wall and the junction of fire rated internal walls and the external wall are needed for review at CC stage. Large scale details illustrating the method in which the tops of fire rated internal walls terminate in the top storey are needed for review at CC stage.	Performance Solution
S5C12	Type A fire-resisting construction –concession for floors Floors do not require an FRL if they are: a) Laid on the ground. b) In Class 2, 3, 5 or 9 buildings and the space below is not a storey nor used for ancillary purposes. c) Timber stage floors over a floor with the required FRL, where the space below is not used (e.g. store room).	This concession has been applied to the following floors in this building: Basement Level 02 need not been provided with an FRL	Noted

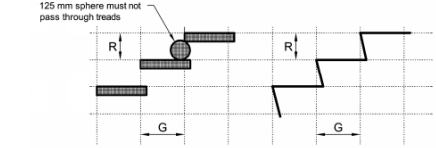
Clause	Description	Comment	Status
	d) Within Class 2, 3 and 4 sole-occupancy units. e) Open-access and above a floor with the required FRL.		
S5C13	Type A fire-resisting construction – floor loading of Class 5 and 9b buildings: Concession	N/A	N/A
S5C14	Type A fire-resisting construction – roof superimposed on concrete slab: Concession	N/A	N/A
S5C15	Type A fire-resisting construction – roof: Concession Roofs do not require an FRL if they are non-combustible and: a) The building is sprinkler protected; b) The building has a rise in storeys of 3 or less; c) Is a Class 2 or 3 building; or d) The building is less than 25m in effective height and a ceiling with a RISF60 is installed below the roof.	The building will be protected within a sprinkler system in accordance with Spec 17, therefore the concession may be applied.	Noted
S5C16	Type A fire-resisting construction – roof lights	N/A	N/A
S5C17	Type A fire-resisting construction – internal columns and walls: Concession	N/A	N/A
S5C18	Type A fire-resisting construction – open spectator stands and indoor sports stadiums: Concession	N/A	N/A
S5C19	Type A fire-resisting construction – carparks	N/A	N/A
S5C20	Type A fire-resisting construction – Class 2 and 3 buildings: Concession	N/A	N/A
Section D: Access and Egress			
Part D2 - Provision for Escape			
D2D2	Application of Part This part does not apply to the internal parts of a sole-occupancy in a Class 2 or 3 building or Class 4 part of a building.	Noted	Noted
D2D3	Number of exits required (NSW variation for Entertainment Venues) - At least two exits need to serve each storey of : - Buildings over 25m in effective height. - Class 2 or 3 buildings subject to C2D6. - Each basement level. - Class 9 buildings: - More than 6 storeys or over 25m in effective height. - Storeys including Class 9a patient care areas. - Storeys containing Class 9c sleeping areas. - Early childhood centres. - Primary or secondary schools exceeding 2 storeys.	As the building has an effective height of greater than 25 metres, at least two exits are required to be provided from every storey. Generally, all parts of the building have been provided with access to at least two exits, however Mezzanine level of basement 01 is provided with a single exit in lieu of two exits. The Fire Engineer shall assess the feasibility of a Performance Solution at CC stage.	Performance Solution

Clause	Description	Comment	Status
	○ Storeys or mezzanines accommodating more than 50 persons. ○ Auditoriums in an entertainment venue. At least one exit must serve each part of storey divided into fire compartments in a Class 9a or 9c building and Class 9b early childhood centre. Access to an exit must be provided without passing through another SOU.		
D2D4	When fire-isolated stairways and ramps are required Every stair in a Class 5 to 9 building must be fire isolated unless it does not connect or pass through more than 3 consecutive floors in a sprinkler protected building, or 2 storeys in a non-sprinkler protected building. Required stairs in a Class 9b early childhood centre must be fire-isolated.	All stairs that are required to be constructed as fire isolated stairs are indicated as such. However, further design development is required including compartment plans and wall type nominating FRL's. This shall be provided for assessment at CC stage.	Compliance Readily Achievable
D2D5	Exit travel distances The BCA limits maximum travel distances to a point of choice and to an exit. No point on the floor must be more than 20m to an exit or a point in which travel in different directions to 2 exits is available, in which case, the maximum distance to 1 exit cannot exceed 40m. (Note Specification 18 concession for sprinkler protected Class 2 and 3 buildings not more than 25m in effective height)	The following areas have been identified with distances exceeding 20m to a point of choice: • Basement 02 – Up to 35m • Basement 01 – Up to 34m • Level 01 – up to 29m • Level 02 – up to 50m • Level 03 – up to 40m • Level 04 – up to 29m • Level 05 – up to 17m (resi) • Level 06 – 23 – up to 14 m • Roof Level- up to 42m (Building C) The following areas have been identified with exit travel distances exceeding 40m: • Basement 02 – Up to 64m • Basement 01 – Up to 49m • Ground Level – up to 47m • Level 02 (Landscape area) – up to 65m • Level 02 (resi-communal) – up to 33 m • Level 03 – up to 49m	Performance Solution
D2D6	Distance between alternative exits Alternative exits must be at least 9m apart and no more than: • Class 2 or 3 buildings and Class 9a patient care areas - 45m apart. • All other cases - 60m apart. Alternative paths of travel must not converge such	The following areas have been identified with distances between alternative exits exceeding 60m: • Basement 02 – Up to 110m • Basement 01 – Up to 123m • Level 01 – up to 70m • Level 02 – up to 83m	Performance Solution

Clause	Description	Comment	Status
	that they become less than 6m apart.	- Level 03 – up to 80m - Level 05- Up to 64m Furthermore, there are various locations where the “scissor stairs” are not located greater than 9m apart.	
D2D7	Height of exits, paths of travel to exits and doorways Except for doorways, paths of travel must have a clear height of at least 2m.	Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
D2D8	Width of exits and paths of travel to exits <i>(NSW variation for Access and egress)</i>	Generally, throughout the building a minimum aggregate exit width of 2000mm is provided, with a 1000mm path of travel throughout the individual exits and paths of travel to those exits. Level 05 contains a Ballroom, at this stage the area has been assessed as being open to the public, not solely hotel guests. (Class 9b) A maximum of 200 persons may be accommodated in this area unless varied via Fire Engineering Performance Solution.	Compliance Readily Achievable
D2D9	Width of doorways in exits or paths of travel to exits <i>(NSW variation for Access and egress)</i>	Based on an assessment of the architectural drawings, all doors in the path of travel or serving as required exits have a minimum clear opening of at least 750mm.	Complies
D2D10	Exit width not to diminish in direction of travel	Noted	Noted
D2D11	Determination and measurement of exits and paths of travel to exits	Noted	Noted
D2D12	Travel via fire-isolated exits	A Performance Solution is required to address fire isolated stairs; - Discharging within the confines of the building - Requiring occupants discharging past unprotected openings in the external wall. - BC-FS03 is technically required to be pressurised as there are more than three (3) entries within the same story. Pressurisation will be omitted via Performance Solution. A Fire Engineer is to assess the feasibility of a Performance Solution to address variations to the DtS requirements.	Performance Solution
D2D13	External stairways or ramps in lieu of fire-isolated exits	N/A	N/A

Clause	Description	Comment	Status
D2D14	Travel by non-fire-isolated stairways or ramps	The non-fire isolated stair serving Level 02 landscaped area exceeds 60m to road or open space and discharges greater than 30m for one of two doorways leading to road or open space.	Performance Solution
D2D15	Discharge from exits <i>(NSW variation for Entertainment Venues)</i> An exit must not be blocked nor be capable of being blocked at its point of discharge.	Alternate exits serving as a required exit (all fire isolated stairs) do not discharge as far apart as practical. A Fire Engineer shall be engaged at CC Stage to address variation to the DtS requirements of the BCA.	Performance Solution
D2D16	Horizontal exits	At this stage of the design, horizontal exits are not required.	Noted
D2D17	Non-required stairways, ramps or escalators Non-required stairs are permitted to connect up to 3 consecutive levels in a sprinklered building if one of the levels has direct access to open space	An external landscaping stair is providing connecting Level 01-04 and is permitted to connect any number of stories as it is outside the building.	Noted
D2D18	Number of persons accommodated	Sanitary facilities have been providing on the Ground Floor which are capable of accommodating 1500 persons (male/female & patrons & staff) Residential levels – Assumed to be more than 5 persons per SOU. The following population numbers are based on available egress with per storey only; Level 01 – 650 persons Level 02- 750 persons Level 03- 650 persons Level 04 (Hotel) – 200 persons Level 04 (Childcare) – 200 persons Level 04 (retail) – 200 persons Level 05- Ballroom/Function/Bar – 200 persons. Building A- Roof top bar – No more than 200 persons.	Noted
D2D19	Measurement of distances	Noted	Noted
D2D20	Method of measurement	Noted	Noted
D2D21	Plant rooms, lift machine rooms and electricity network substations: Concession A ladder may be used in lieu of a stairway as an exit from: a) a plant room with a floor area not more than 100m ² , or b) all but one point of egress from a plant room with a floor area not more than 200m ² .	N/A - Level access is provided to all plant areas.	N/A

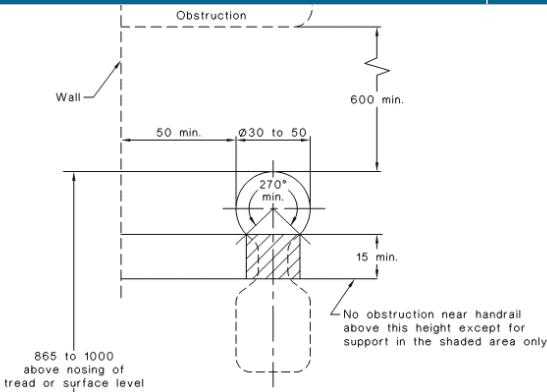
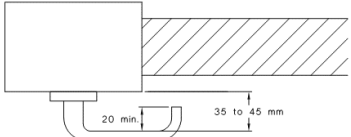
Clause	Description	Comment	Status
D2D22	Access to lift pits Access requirements apply to lift pits over 3m in depth.	Lift consultant to confirm.	Compliance Readily Achievable
D2D23	Egress from primary schools	N/A – Class 9b primary school parts not contained within the building.	N/A
Part D3 - Construction of Exits			
D3D2	Application of Part (NSW variation for Entertainment Venues)	Noted	Noted
D3D3	Fire-isolated stairways and ramps Fire resisting shafts must be constructed of non-combustible materials and so that if there is local failure it will not cause structural damage or impair the fire resistance of the shaft.	The Structural Engineer is required to provide design certification at Construction Certificate stage with regards to the structural design.	Compliance Readily Achievable
D3D4	Non-fire-isolated stairways and ramps Required stairs in a building having a rise in storeys of not more than 2 must be constructed only of reinforced or prestressed concrete, or steel not less than 6mm thick, or timber that has a finished thickness of not less than 44mm and an average density of not less than 800 kg/m ³ at a moisture content of 12%.	The Structural Engineer is required to provide design certification at Construction Certificate stage with regards to the structural design.	Compliance Readily Achievable
D3D5	Separation of rising and descending stair flights	There are no direct connections between rising and descending flights, therefore the requirements of this clause have been satisfied.	Complies
D3D6	Open access ramps and balconies	N/A	N/A
D3D7	Smoke lobbies	N/A	N/A
D3D8	Installations in exits and paths of travel Electrical meters and motors, distribution boards and telecommunication boards must not be accessed from fire isolated exits and, if located in corridors leading to exits, should occur in non-combustible or fire protective smoke sealed enclosures. No openings to ducts conveying hot products of combustion permitted in required exits. Gas or fuel services not permitted in required exits. Electric or services equipment in paths of travel to exits must be within a non-combustible and smoke sealed enclosure.	Sufficient details have not been provided at this stage to demonstrate compliance with the requirements of BCA Clause D3D8. Distribution board enclosures must either be non-combustible or a fire protective covering with doorways or openings suitably sealed against smoke spreading from the enclosure. Updated architectural drawings including a door schedule are to be provided for further assessment at CC stage.	Compliance Readily Achievable
D3D9	Enclosure of space beneath stairs and ramps	N/A	N/A
D3D10	Width of required stairways and ramps A stairway or ramp more than 2m in width is only counted as having a width of 2m unless it is divided by a continuous handrail or balustrade between landings and each division is less than 2m wide.	Noted	Noted
D3D11	Pedestrian ramps Ramps serving as required exit must have a	Compliance has been demonstrated. No ramps exceed a gradient of 1:8 where they serve as a required exit of	Complies

Clause	Description	Comment	Status																												
	gradient not less steep than 1:8. If the ramp is required for disabled access under Part D4 it must comply with AS1428.1. The surface of the ramp must have a non-slip finish.	path of travel to a required exit.																													
D3D12	Fire-isolated passageways Fire isolated passageways are to have an FRL equivalent to the fire resisting stair shaft as specified in Specification 5 when tested from the outside	Sufficient details have not been provided at this stage for assessment, however compliance is readily achievable. Architectural drawings shall nominate the required FRL for fire isolated passageways at CC stage.	Compliance Readily Achievable																												
D3D13	Roof as open space	N/A	N/A																												
D3D14	Going and risers <i>(NSW variation for Entertainment Venues)</i> To provide safe passage, stairways must comply with the following: • minimum 2 risers / maximum 18 in each flight • risers 115mm min 190 mm max - going 250mm min 355mm max - 2R+G 550mm min 700mm max. • Adjacent risers, or between adjacent goings a variation no greater than 5mm is permitted and the largest and smallest riser within the flight or the largest and smallest going within a flight is not to exceed a variation of 10mm. • Under the requirements of AS1428.1-2009 open riser are not permitted. • All treads to be fitted with non-slip finish or non-skid strips. • Treads are required to have a surface or nosing strip with a slip-resistance classification not less than listed in Table D3D15 when tested in accordance with AS 4586 <table><tr><th></th><th colspan="2">Riser (R)</th><th colspan="2">Going (G) ⁽²⁾</th><th colspan="2">Quantity (2R+G)</th></tr><tr><th></th><th>Max</th><th>Min</th><th>Max</th><th>Min</th><th>Max</th><th>Min</th></tr><tr><td>Public stairways</td><td>190</td><td>115</td><td>355</td><td>250</td><td>700</td><td>550</td></tr><tr><td>Private stairways⁽¹⁾</td><td>190</td><td>115</td><td>355</td><td>240</td><td>700</td><td>550</td></tr></table> 		Riser (R)		Going (G) ⁽²⁾		Quantity (2R+G)			Max	Min	Max	Min	Max	Min	Public stairways	190	115	355	250	700	550	Private stairways ⁽¹⁾	190	115	355	240	700	550	Large scale stair details are needed for review and should demonstrate compliance with the requirements of this clause at CC stage.	Compliance Readily Achievable
	Riser (R)		Going (G) ⁽²⁾		Quantity (2R+G)																										
	Max	Min	Max	Min	Max	Min																									
Public stairways	190	115	355	250	700	550																									
Private stairways ⁽¹⁾	190	115	355	240	700	550																									
D3D15	Landings Ramps Surfaces, stair tread surfaces or nosing strips, and stair landing surfaces, or landing nosing strips to a flight below, must achieve slip-resistance classifications to AS4586-2013 as follows: <table><tr><th><u>Application</u></th><th><u>Dry Surface Conditions</u></th><th><u>Wet Surface Condition</u></th></tr><tr><td>1:14 or steeper ramps</td><td>P4 or R11</td><td>P5 or R12</td></tr></table>	<u>Application</u>	<u>Dry Surface Conditions</u>	<u>Wet Surface Condition</u>	1:14 or steeper ramps	P4 or R11	P5 or R12	A finishes schedule specifying ramp and stairway finishes and corresponding slip resistance certification/test reports are needed for review.	Compliance Readily Achievable																						
<u>Application</u>	<u>Dry Surface Conditions</u>	<u>Wet Surface Condition</u>																													
1:14 or steeper ramps	P4 or R11	P5 or R12																													

Clause	Description	Comment	Status
	Ramps of 1:14 to 1:20 P3 or R10 P4 or R11 Tread or Landing Surface P3 or R10 P4 or R10 Nosing Strip or Landing Strip P3 P4		
D3D16	Thresholds <i>(NSW variation for Entertainment Venues)</i> Steps should not occur at doorways without a threshold landing except as follows: - In patient care areas in a Class 9a, the door sill is not more than 25mm above the finished floor level to which the door way opens, - In a building required to be accessible and the doorway opens to a road or open space and is provided with a threshold ramp or step ramp in accordance with AS1428.1, - Or in any other case a single 190mm step is permitted at doors leading to the exterior.	Many of the fire stairs will discharge into the public lobby of the Building A-C. As a result of the building being within a flood hazard area, a step will be incorporated within the threshold of the doorway. This is a technical non-compliance and shall be addressed via BCA Performance Solution at CC stage. Note that where access for people with disabilities is required it is not permitted to have a step at the threshold of a doorway.	Performance Solution
D3D17	Barriers to prevent falls	Specific details regarding the construction of barriers have not been provided at this stage, however, the elevations and sections appear to show balustrades in locations and heights as required. Updated architectural drawings and BCA specification to be provided for further assessment.	Compliance Readily Achievable
D3D18	Height of barriers <i>(NSW variation for Entertainment Venues)</i> Barriers must generally not be less than 865mm for stairways and ramps and 1m in all other cases. A 700mm balustrade is permitted in front of fixed seating in an auditorium.	Specific details regarding the construction of barriers have not been provided at this stage, however, the elevations and sections appear to show balustrades in locations and heights as required. Updated architectural drawings and BCA specification to be provided for further assessment.	Compliance Readily Achievable
D3D19	Openings in barriers Openings in a required barrier must not allow a 125mm sphere to pass through, except for concessions applying to fire-isolated stairs or other emergency use areas excluding Class 9b early childhood centres. Where a barrier is fixed to the face of a landing, balcony or the like, the opening between the barrier and the face must not permit a 40mm sphere to pass through.	Specific details regarding the construction of barriers have not been provided at this stage, however, the elevations and sections appear to show balustrades in locations and heights as required. Updated architectural drawings and BCA specification to be provided for further assessment.	Compliance Readily Achievable
D3D20	Barrier climbability Where the level of the surface below is 4m or more, a balustrade or other barrier must not facilitate climbing of horizontal elements between	Specific details regarding the construction of barriers have not been provided at this stage, however, the	Compliance Readily Achievable

Clause	Description	Comment	Status
	150mm and 760mm above the floor.	elevations and sections appear to show balustrades in locations and heights as required. Updated architectural drawings and BCA specification to be provided for further assessment.	
D3D21	Wire barriers	Specific details regarding the construction of barriers have not been provided at this stage, however, the elevations and sections appear to show balustrades in locations and heights as required. Updated architectural drawings and BCA specification to be provided for further assessment.	Compliance Readily Achievable
D3D22	Handrails Handrails to exits including parts of fire isolated exit serving an area required to be accessible to people with disabilities must comply with Clause 12 of AS1428.1, viz: • Handrails not to obstruct circulation space • 30-50mm diameter • 865-1000mm above nosing line of stairs • 865-1000mm above ramps and landings • Consistent height throughout • 50mm grip clearance and no obstructions to handhold • Continuous at internal (return) landings • Provided with handrail extensions and 180 degree curled ends	Handrail compliance should be confirmed by the access consultant.. Handrails are to be provided in compliance with Clause D4D4, which includes the following- Non-Fire Isolated Stairways and Ramps All stairs and ramps not used as an emergency exit are to have handrails installed on both sides that comply with Clause 10 & 11 of AS1428.1-2009 Fire Isolated Stairways and Ramps In Fire Isolated Stairways & Ramps a handrail is required to be installed to at least one side of stair flights and located not less than 865mm above the nosing's of stair treads and the floor surfaces of landings Consistent Handrail Heights for all stairways The height of the top of the handrail, measured at a height of between 865mm - 1000mm vertically from the stair nosing shall be consistent throughout the ramp (or stairs) and any landings. All stairs including fire stairs are required to be designed to comply with Clause 12 of AS1428.1 - 2009 Early Childhood Centres One handrail must be fixed at a height of not less than 865mm and a second handrail is required to be fixed at a height between 450mm and 700mm & requires a diameter of 16-45mm.	Compliance Readily Achievable
	Ramps		

Clause	Description	Comment	Status	
	(b) Elevation DIMENSIONS IN MILLIMETRES FIGURE 14 RAMP HANDRAILS Stairways SECTIONAL VIEW DIMENSIONS IN MILLIMETRES FIGURE 26(B) STAIRWAY LOCATION AND HANDRAIL EXTENSIONS AT END OF STAIRWAY OTHER THAN AT LINE OF BOUNDARY (a) Plan DIMENSIONS IN MILLIMETRES Handrail Profile			

Clause	Description	Comment	Status
			
D3D23	Fixed platforms, walkways, stairways and ladders Platforms, walkways, stairs, ladders and the like that give access to and around plant and equipment, machine rooms, attic spaces and other low use areas of the building are permitted provided that construction details are to AS1657.	Platforms, walkways, stairs, ladders and the like that give access to and around plant and equipment, machine rooms, attic spaces and other low use areas of the building are permitted provided that construction details are to AS1657.	Compliance Readily Achievable
D3D24	Doorways and doors <i>(NSW variation for Entertainment Venues)</i> Must not be revolving door, roller shutter or tilt door. Can be fitted with a sliding door if it leads directly to open space and can be opened manually under a force of not more than 110N and be fitted with a fail-safe device if the door is power operated.	Auto sliding doors at the entries into the residential buildings must comply with these requirements.	Compliance Readily Achievable
D3D25	Swinging doors Defined exit doors that serve a part of a building with a floor area over 200m ² must swing outward in the direction of exit travel. Exit doors must not encroach more than 500mm into the required width of the stair or 100mm when fully open and must swing in the direction of travel.	Within the retail components on ground there are various locations where the exit doors serve areas which exceed 200m ² and the doors swing against the direction of travel. A Fire Engineer will be engaged to assess the feasibility of a Performance Solution at CC stage	Performance Solution
D3D26	Operation of latch <i>(NSW variation for Entertainment Venues)</i> Exit doors should be provided with "free handle" egress via a downward or pushing action and, if serving an area accessible to people with disabilities, must have non-slip "D" pull handles with 35-45mm hand clearances.  (a) Isometric view  (b) Plan view Where the latch operation device is not	No details of hardware have been provided at this stage. The ballroom area of the hotel is capable of accommodating more than 100 persons and may be used for public functions. With this in mind doors must be; - without a key from the side that faces a person seeking egress; and - by a single hand pushing action on a single device such as a panic bar located between 900 mm and 1.2 m from the floor; and	Compliance Readily Achievable

Clause	Description	Comment	Status
	located on the door leaf itself- • manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located not less than 500 mm from an internal corner; and • for a hinged door, between 1 m and 2 m from the door leaf in any position; • and for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position. • braille and tactile signage complying with Clause 3 and 6 of Specification D3.6 must identify the latch operation device. Doors in a Class 9b building (other than schools or early childhood centres) serving a storey or room accommodating more than 100 people must be provided with a panic bar.	(c) where a two-leaf door is fitted, the provisions of (a) and (b) need only apply to one door leaf if the appropriate requirements of D2D9 are satisfied by the opening of that one leaf; and (d) where the door is a door in a path of travel providing re-entry to the building from a balcony, terrace or the like, it may be fitted with key-operated fastenings only, the tongues of which must be locked A door schedule and BCA specification is to be submitted at Construction Certificate stage which demonstrates compliance with D3D6 and AS1428.1-2009.	
D3D27	Re-Entry from Fire-Isolated Exits Fire isolated stair doors must facilitate re-entry from within the stair back onto the floor on every 4th level at all times and on all levels in the event of a fire alarm, where the exit stair serves a storey above 25m in effective height, a Class 9a building, a Class 9b early childhood centre or a Class 9c building Doors of fire-isolated exits must not be locked from the inside of a fire-isolated exit, unless: <u>Option 1</u> • All doors are fitted with a fail-safe device that automatically unlocks the door upon activation of a fire alarm; AND • On at least every fourth storey, the doors are not able to be locked at all and are sign posted stating re-entry is available at that level. <u>Option 2</u> • All doors are fitted with a fail-safe device that automatically unlocks the door upon activation of a fire alarm; AND • An intercommunication or audible/visual alarm system is provided within the stair to assist persons who may accidentally be locked within the stair. <u>Note:</u> A door serving an early childhood centre need only be fitted with a fail-safe device that automatically unlocks the door upon activation of an alarm.	As the building has an effective height which exceeds 25m, re-entry is required to be provided from all fire isolated stairs. A door schedule is required to be provided at CC stage which demonstrates compliance with the requirements of this Clause.	Compliance Readily Achievable
D3D28	Signs on doors Signage in capital letters not less than 20mm high to be provided on doors as follows An automatic door held open by an automatic hold-open device: FIRE SAFETY DOOR - DO NOT OBSTRUCT	Under Section 108 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 a notice is to be displayed in a conspicuous location adjacent to a doorway providing access to but not	Compliance Readily Achievable

Clause	Description	Comment	Status
	ii. for a self-closing door FIRE SAFETY DOOR DO NOT OBSTRUCT DO NOT KEEP OPEN iii. for a door discharging from a fire-isolated exit FIRE SAFETY DOOR - DO NOT OBSTRUCT	within a fire isolated stairway, passageway or ramp. The words "OFFENCES RELATING TO FIRE EXITS" are to be provided in letters at least 8mm high and the remaining words are to be at least 2.5mm high. The notice is to state the following: OFFENCES RELATING TO FIRE EXITS It is an offence under the Environmental Planning and Assessment Act 1979 (a) to place anything in or near this fire exit that may obstruct persons moving to or from this exit, or (b) to interfere with or obstruct the operation of any fire doors, or (c) to remove, damage or otherwise interfere with this notice.	
D3D29	Protection of openable windows Windows serving a residential bedroom or serving an early childhood centre must be protected where the floor is 2m or more above the external surface below. Window openings must be provided with protection if the floor below the window is 2m or more above the surface beneath in the bedrooms of Class 2 or 3 buildings or Class 9b early childhood centre. Where the window sill is below 1.7m above the floor level, the openable portion of the window must be protected with - a device to restrict the window opening or - a screen with secure fittings A device or screen required must: - not permit a 125mm sphere to pass through the window opening or screen; and - resist an outward horizontal action of 250N against the window restrained by a device or screen protecting the opening and have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden. Where the fall distance from the floor to the surface below is 4m or more or where a release device occurs to a required screen, an additional barrier at 865mm above floor level is required and must be non-climbable with gaps no greater than 125mm between elements.	Window hardware details have not been provided at this stage. A window schedule and BCA specification are to be submitted for further assessment demonstrating compliance with D3D29.	Compliance Readily Achievable
D3D30	Timber stairways: Concession	N/A	N/A
NSW D3D31	Doors in the path of travel in an Entertainment Venue	N/A	N/A
Part D4 - Access for People with Disabilities			
D4D2	General building access requirements	Please refer to 3 rd Party Access	Noted

Clause	Description	Comment	Status
	Access is generally required for persons with a disability throughout all areas unless specifically exempted.	Consultant report for assessment of BCA Part D4.	
Section E: Services and Equipment			
Part E1 - Fire Fighting Equipment			
E1D2	Fire hydrants The building requires a fire hydrant system in accordance with AS2419.1-2021. Where a sprinkler system is installed in the building in accordance with AS 2118.1, AS 2118.4 or AS 2118.6, the fire hydrant booster protection requirements of clauses 7.6.2 and 7.6.3 of AS2419.1 do not apply. <i>Note: Varied booster protection requirements for sprinklered and non-sprinklered buildings.</i> <i>Note: Ring main requirements for large-isolated buildings and buildings exceeding 25m in effective height.</i>	The Hydraulic Engineer is to provide design drawings, specification and design certification in accordance with AS2419.1-2021, BCA Clause E1D2 and the relevant Fire Engineering Performance Solution; The following non-compliances have been identified in relation to the hydrant system; 1. Booster location being not within sight of all entries to the building.	Performance Solution
E1D3	Fire hose reels Fire hose reel coverage to AS2441-2005 is required throughout with hose reels located adjacent to stairs and exits. Where coverage is not achieved with hose reels located Additional hose reels are permitted to be located along the paths of travel to achieve coverage where Hoses are not permitted to pass through fire or smoke doors to achieve hose reel cover. Note: Fire hose reels not required to: - • Class 2, 3, 4, 5 and 9c buildings; • Class 8 electricity network substations; • Classrooms and associated corridors in primary and secondary schools	The Hydraulic Engineer must ensure that compliant coverage is provided to all areas of the building and must provide design certification to accompany the drawings certifying the design complies with Clause E1D3 of the BCA and AS2441 - 2005.	Compliance Readily Achievable
E1D4	Sprinklers <i>(NSW variation for Residential Aged Care)</i> Fire sprinkler protection to AS2118.1-2017, AS2118.4- 2012 and AS2118.6-2012 as relevant is a mandatory requirement for the project if:- • The building effective height exceeds 25m. (If any part of the development exceeds 25m effective height, all parts of the complex require sprinklers.) • Class 2 or 3 building and any other class of building containing a Class 2 or 3 part (Note: residential care buildings are excluded), throughout the whole building including any part of another class, if any part of the building has a rise in storey of 4 or more and an effective height of not more than 25m. • Class 3 building used as a residential care	The Hydraulic Engineer is to provide design drawings, specification and design Certification in accordance with AS2118.6-2012, BCA Clause E1D4 and shall identify any variations to the DtS requirements.	Compliance Readily Achievable

Clause	Description	Comment	Status
	building. - The building is defined as a large isolated building (Refer to BCA Ref C2.3 above). - An enclosed carpark with more than 40 cars occurs. - A retail fire compartment over 3,500m²/21,000m³ occurs. Sprinkler pumps and valves must be accessible from the street. Sprinkler system activation must be linked to an audible occupant warning system. Sprinkler hazard Class under AS2118 needs to be agreed where uncertainty of usage under Appendix 1 of the Code occurs.		
E1D5	Where sprinklers are required: all classifications	The Hydraulic Engineer is to provide design drawings, specification and design Certification in accordance with AS2118.6-2012, BCA Clause E1D5 and shall identify any variations to the DtS requirements.	Compliance Readily Achievable
E1D6	Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings	The Hydraulic Engineer is to provide design drawings, specification and design Certification in accordance with AS2118.6-2012, BCA Clause E1D6 and shall identify any variations to the DtS requirements.	Compliance Readily Achievable
E1D7	Where sprinklers are required: Class 3 building used as a residential care building	N/A	N/A
E1D8	Where sprinklers are required: Class 6 building	The Hydraulic Engineer is to provide design drawings, specification and design Certification in accordance with AS2118.6-2012, BCA Clause E1D8 and shall identify any variations to the DtS requirements.	Compliance Readily Achievable
E1D9	Where sprinklers are required: Class 7a building, other than an open-deck carpark	The Hydraulic Engineer is to provide design drawings, specification and design Certification in accordance with AS2118.6-2012, BCA Clause E1D9 and shall identify any variations to the DtS requirements.	Compliance Readily Achievable
E1D10	Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings	N/A	N/A
E1D11	Where sprinklers are required: Class 9b buildings Sprinklers are required throughout any building containing a Class 9b early childhood centre that is not wholly within a storey that provides direct egress to a road or open space.	The Hydraulic Engineer is to provide design drawings, specification and design Certification in accordance with AS2118.6-2012, BCA Clause E1D11 and shall identify any variations to the DtS requirements.	Compliance Readily Achievable

Clause	Description	Comment	Status
E1D12	Where sprinklers are required: additional requirements	N/A	N/A
E1D13	Where sprinklers are required: occupancies of excessive hazard	N/A	N/A
E1D14	Portable fire extinguishers Portable Fire Extinguishers are required be installed to sections (3) and (4) in Clause E1D14 and AS 2444 requirements, at: - Throughout Class 5 buildings - where fire hose reels are not installed - Class 2, 3 or 4 residential areas are to be protected by 2.5kg ABE type fire extinguishers located in common areas on the storey served and located not more than 10m from each sole occupancy unit entry door.	Compliance is readily achievable. The architectural drawings are to be updated to denote the location of portable fire extinguishers in accordance with this clause.	Compliance Readily Achievable
E1D15	Fire control centre A fire control centre for Fire Indicator, Fire Fans Control and Emergency Intercom panels is required for buildings of over 25m in effective height or buildings over 18,000m ² in area, at a location readily available for firefighting operations and located at or near the main building entry. Buildings over 50m in effective height require a fire rated fire control room with prescribed requirements for layout, access, location and equipment with the following features: 2 hr FRL concrete/masonry construction. - Low hazard linings (per fire stairs) - No extraneous services passing through 2 hr fire FRL doors - No penetrations through floor over 2-hour fire dampers, etc. - Doors must open into room - Two access points needed, one from front entry foyer of building and one from public place. - Contents required: - FIP - Controls for pumps, fans and other emergency gear - Phone - Whiteboard and pinup board - Plan layout table - Tactical fire plans - May also contain - MECP - Lift annunciation panels - Gas/electric controls - Emergency generator backup - Dedicated fire isolated pressurisation	A fire control room is provided adjoining Building C Entry. The fire control room is provided with two accessible paths, one from the Building C Lobby and from the street. The Fire control room is located greater than 300mm from street level and shall be addressed via Performance Solution.	Performance Solution

Clause	Description	Comment	Status
	system to ventilate with 30 air changes required.		
E1D16	Fire precautions during construction Fire services are required during construction, including fire hydrants and hose reels which must be active and operational after the building reaches a construction stage effective height of 12m. When the building reaches 12m effective height: - All required hydrants and hose reels must be operational on every storey covered by a roof or floor slab over, except for the two uppermost storeys. - Any required booster connections must be installed.	Further discussion required with builder to determine that this is included in their program. BCA compliance with respect to fire services during construction can be problematic as hydrants with required pressures and flows and booster connections often cannot be achieved at the required time. A temporary fire protection system, possibly with temporary boosters and no fire pumps, may need to be agreed with the fire brigade. This needs to be put in place early in the construction programme and may require liaison with the builder and his fire services contractor.	Compliance Readily Achievable
E1D17	Provisions for special hazards	EV charging is a special hazard and requires a separate hazard assessment from a Fire Engineer.	Performance Solution
Part E2 - Smoke Hazard Management			
E2D2	Applicable of requirements	Part is not applicable to - open deck car parks - open spectator stands - a Class 8 electricity network substation with a floor area not more than 200m² - storerooms, etc. less than 30m² - sanitary compartments - plant rooms or the like	Noted
E2D3	General requirements	Noted	Noted
E2D4	Fire-isolated exits	Exits that serve a storey greater than 25m are required to be provided with a stair pressurisation system. Mechanical Engineer shall be provided design drawings and certification at CC stage in accordance with E2D4 & AS1668.2	Compliance Readily Achievable
E2D5	Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building	The building is to be provided with a smoke detection and alarm system in accordance with BCA Specification 20. Dry Fire Engineer shall provide design drawings, specification and design certification in accordance with the relevant Australian Standard's and Fire Engineering Performance Solution Report. Where the building is provided with a combined smoke alarm and smoke	Compliance Readily Achievable

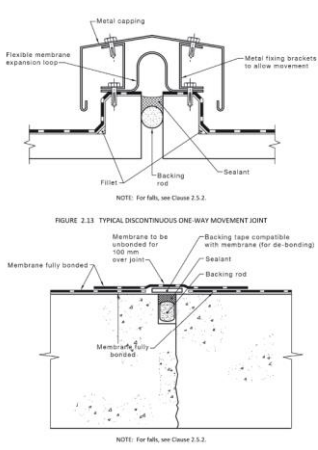
Clause	Description	Comment	Status
		detection system, smoke detectors are technically not required in public corridors unless required as part of the Fire Engineering Strategy as the building is sprinkler protected.	
E2D6	Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings	The building is technically required to be provided with a zone pressurisation system between vertically separated fire compartments in accordance with BCA Clause E2D6. A Fire Engineer is to be engaged at CC stage to assess the feasibility of a Performance Solution to address variations to the DtS requirements.	Performance Solution
E2D7	Buildings more than 25 m in effective height: Class 9a buildings	N/A	N/A
E2D8	Buildings not more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building	N/A	N/A
E2D9	Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings	N/A	N/A
E2D10	Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4 <i>(NSW variation for Entertainment Venues)</i>	N/A	N/A
E2D11	Buildings not more than 25 m in effective height: Class 9a and 9c buildings	N/A	N/A
E2D12	Class 7a buildings	The Class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2, and comply with clause 5.5 of AS 1668.1. Mechanical Engineer to provide design certification to accompany services drawings at CC stage.	Compliance Readily Achievable
E2D13	Basements (other than Class 7a buildings)	The basement levels will be provided with a Sprinkler system. The Hydraulic Engineer is to provide design drawings, specification and design Certification in accordance with AS2118.6-2012, BCA Clause E1D4 and shall identify any variations to the DtS requirements.	Compliance Readily Achievable
E2D14	Class 6 buildings - in fire compartments more than 2000 m²: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)	N/A	N/A
E2D15	Class 6 buildings - in fire compartments more than 2000 m²: Class 6 building (containing an enclosed common walkway or mall)	The Class 6 fire compartment extends over two (2) storeys and exceeds 2000 m ² . Technically, the building is required to be provided with an automatic smoke exhaust system complying with BCA	Compliance Readily Achievable

Clause	Description	Comment	Status
		Clause E2D14. However, a Fire Engineer will be engaged at CC stage to assess feasibility of Performance Solution.	
NSW E2D16	Class 9b – assembly buildings: all	It is proposed to provide an early childhood centre within Level 02 & a public function area of the hotel on level 05. A building or part of a building used as an early childhood centre must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS 1668.1) which does not form part of the smoke hazard management system, on the activation of— (i) smoke detectors installed complying with S20C6; and (ii) any other installed fire detection and alarm system, including a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.	Compliance Readily Achievable
NSW E2D17	Class 9b – assembly buildings: night clubs, discotheques and the like	N/A	N/A
NSW E2D18	Class 9b – assembly buildings: exhibition halls, museums and art galleries	N/A	N/A
NSW E2D19	Class 9b – assembly buildings: other assembly buildings (not listed in NSW E2D16 to E2D18)	N/A- Compartment size does not exceed 2000m ² .	N/A
NSW E2D20	<i>(NSW variation - This clause has deliberately been left blank.)</i>	-	-
E2D21	Provisions of special hazards	EV charging is a special hazard and requires a separate assessment from a fire engineer.	Performance Solution
Part E3 - Lift Installations			
E3D2	Lift installations Electric and electrohydraulic lifts must comply with the design requirements of BCA Specification 24.	Certification of lift design to be provided	Compliance Readily Achievable
E3D3	Stretcher facility in lifts Buildings greater than 12m in effective height require a lift sized to accommodate a stretcher of 2m x 0.6m x 1.4m high. The lift must serve every level to which lift access is provided.	The spatial requirements of the lift demonstrate compliance with the requirements of E3D3.	Complies
E3D4	Warning against use of lift in fire Warning signage is required at lift doors advising	Signage to be installed stating.	Compliance Readily Achievable

Clause	Description	Comment	Status
	that lifts should not be used in the event of a fire.		
E3D5	Emergency lifts Emergency lifts of prescribed size, operation and fire isolation are required in buildings where: - the building has an effective height over 25m, or - a patient care area occurs in a health care building at a level that does not have direct access to a road or open space. Where more than two passenger lifts serve a storey, two emergency lifts must be provided, and these must be in separate shafts if multiple lift shafts occur. The following requirements apply to an emergency lift: - Must serve all storeys served by a passenger lift. - Must be contained in a fire rated shaft. - If the building effective height exceeds 75m, must have a 600kg rating if not provided with a stretcher facility or a 900kg rating if stretcher facility is provided. - If serving a patient care area in a health care building, have minimum clear car dimensions of 2280mm depth, 1600mm width and 2300 mm height. Doors must be 1300mm wide and 2100mm high. (All dimensions measured clear of all obstructions including handrails.) - If serving a patient care area in a health care building, must be connected to a standby power system where installed.	Each lift within the building is required to be designed as an emergency lift. The lifts within each block of residential sole-occupancy units appear to be fire separated, therefore each lift is required to be an emergency lift. Confirmation to be provided that emergency lift access is provided to all storeys and all relevant areas, if not provided then this non-compliance is required to be addressed via a fire engineered performance solution. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
E3D6	Landings	The architectural drawings detail compliant landings in accordance with BCA Clause E3D6.	Complies
E3D7	Passenger lift types and their limitations Every passenger lift must be one of the types identified in Sections (1) of Clause E3D7 of the BCA and not rely on a constant pressure device for its operation if the lift car is fully enclosed.	No specific details provided at this stage regarding accessible features incorporated within the lift. Lift floor dimension of not less than 1400 mm wide x 1600 mm deep have been detailed within the architectural drawings. Detailed architectural drawings and specification to be provided for assessment at Construction Certificate stage.	Compliance Readily Achievable
E3D8	Accessible features required for passenger lifts Every passenger lift must have accessible features where applicable as identified in Clause E3D8 of the BCA.	BCA Clause E3D8 is to be assessed by a third-party Access Consultant	Noted
E3D9	Fire service control	Certification of lift design to be provided	Compliance

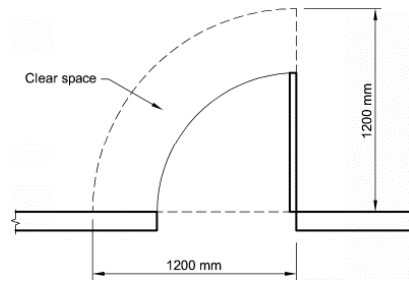
Clause	Description	Comment	Status
	Where lifts serve a storey above 12m in effective height: - A fire service control switch is required for each lift or lift group. - A lift car fire service drive control is required for each lift.		Readily Achievable
E3D10	Residential care buildings	N/A	N/A
E3D11	Fire service recall control switch The fire service control switch must be located at the landing nominated by the appropriate authority and, when activated, must return all lifts to the nominated floor. If a lift car drive control has been activated, it shall override the landing fire service control switch.	Certification of lift design to be provided	Compliance Readily Achievable
E3D12	Lift car fire service drive control switch The lift car service drive control must be activated from within the lift car. The switch is to be located between 600mm and 1500mm above the lift car floor and be labelled "FIRE SERVICE" in indelible white lettering on red background. The "OFF" and "ON" positions are to be identified.	Certification of lift design to be provided.	Compliance Readily Achievable
Part E4 - Emergency Lighting, Exit and Warning Systems			
E4D2	Emergency lighting requirements Emergency lighting is to be provided throughout the building.	Emergency lighting is to be provided in: - every fire-isolated stairway, fire-isolated ramp or fire-isolated passageway. - Every passageway, hallway, corridor or the like, and - Every passageway, hallway, corridor or the like, that is part of the path of travel to an exit. - In every room having a floor area more than 100m² that does not open to a corridor or space that has emergency lighting or to a road or open space. - In any room having a floor area more than 300m². - In every required non-fire isolated stairway - To every room or space that has public access in a Class 6 or building if: - the floor area is more than 300m²; - or if any point on the floor is more than 20m from the nearest doorway opening directly to the road or open space; or - if the egress involves a vertical rise within the building of more than 1.5m.	Compliance Readily Achievable

Clause	Description	Comment	Status
		Electric Engineer to provide design drawings, specification and design certification in accordance with BCA Clause E4D2 & AS2293.1-2018	
E4D3	Measurement of distances	Noted	Noted
E4D4	Design and operation of emergency lighting Emergency lighting must comply with to AS2293.1	Electrical Engineer to provide design drawings, specification and design certification in accordance with BCA Clause E4D4 & AS2293.1-2018	Compliance Readily Achievable
E4D5	Exit signs Exit signs are to be provided in accordance with Clause E4D5 of the BCA.	Exit signs must be clearly visible to person approaching the exit and must be installed on, above or adjacent to; 1. A door providing direct egress from a storey to a stairway, passageway or ramp serving as a required exit. 2. A door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space. 3. A horizontal exit 4. A door serving as or forming part of a required exit in a storey required to be provided with emergency lighting. Electrical Engineer to provide design drawings, specification and design certification in accordance with BCA Clause E4D5 & AS2293.1-2018	Compliance Readily Achievable
E4D6	Direction signs <i>(NSW variation for Entertainment Venues)</i> Where an exit is not readily apparent then exit signs with directional arrows must be installed in appropriate positions in corridors, hallways, lobbies and the like indicating the direction to a required exit	Electrical Engineer to provide design drawings, specification and design certification in accordance with BCA Clause E4D6 & AS2293.1-2018	Compliance Readily Achievable
E4D7	Class 2 and 3 buildings and Class 4 parts: Exemptions	Noted	Noted
E4D8	Design and operation of exit signs 1. Exit signs are to operate in accordance with AS 2293.1. 2. Photo luminescent exit signs are to comply with Specification 25.	Electrical Engineer to provide design drawings, specification and design certification in accordance with BCA Clause E4D8 & AS2293.1-2018	Compliance Readily Achievable
E4D9	Emergency warning and intercom systems An emergency warning and intercom system complying with AS 1670.4 must be installed throughout the building.	Details demonstrating compliance and design certification will be required from services consultants at Construction Certificate stage in accordance with AS1670.4	Compliance Readily Achievable
Section F: Health and Amenity			
Part F1 - External waterproofing, rainwater management and rising damp			
F1D1	Deemed-to-Satisfy Provisions	A test report on the proposed wall	Compliance

Clause	Description	Comment	Status
	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F1P1 to F1P4 are satisfied by complying with F1D2 to F1D8. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	system is to be provided. The test report must include the following information: (i) Name and address of the person supervising the test. (ii) Test report number. (iii) Date of the test. (iv) Cladding manufacturer's name and address. (v) Construction details of the test specimen, including a description, and drawings and details of the components, showing modifications, if any. (vi) Test sequence with the pressures used in all tests. (vii) For each of the static and cyclic pressure tests, full details of all leakages, including position, extent and timing.	Readily Achievable
F1D3	Stormwater drainage Stormwater drainage must comply with AS/NZS 3500.3.	Hydraulic drawings and design certification to be provided at Construction Certificate stage.	Compliance Readily Achievable
F1D4	Exposed joints Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must be protected in accordance with Section 2.9 of AS 4654.2; and not be located beneath or run through a planter box, water feature or similar part of the building. 	Structural Engineer/Architect to confirm compliance.	Compliance Readily Achievable
F1D5	External waterproofing membranes Trafficable roofs, balconies, podiums or similar parts of a building require a waterproofing membrane complying with AS4654.1 and AS4654.2, which must be installed directly on the structural substrate.	It is recommended that a 3 rd party waterproofing consultant is engaged to review all internal and external waterproofing details, particularly around balconies, podiums and planter boxes which are susceptible to failure.	Compliance Readily Achievable
F1D6	Damp-proofing Moisture from the ground must be prevented from reaching the lowest floor timber and the walls	No details provided at this stage. This matter to be addressed via detailed architectural drawings & BCA	Compliance Readily Achievable

Clause	Description	Comment	Status
	above the lowest floor joists, the walls above the dam proof course and the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders. Damp proof course must consist of a material that complies with AS/NZS 2904 or an impervious termite shield in accordance with AS 3660.1.	specification	
F1D7	Damp-proofing of floors on the ground A vapour barrier in accordance with AS2870 is to be provided beneath the basement floor slab.	No details provided at this stage. This matter to be addressed via detailed architectural drawings & BCA specification	Compliance Readily Achievable
F1D8	Subfloor ventilation	N/A	N/A
Part F2 - Wet areas and overflow protection			
F2D1	Deemed-to-Satisfy Provisions Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F2P1 and F2P2 are satisfied by complying with F2D2 to F2D4. Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	No details provided at this stage. It is recommended that a suitably qualified waterproofing consultant is engaged to review all external waterproofing details. This matter to be addressed via detailed architectural drawings & BCA specification.	Compliance Readily Achievable
F2D2	Wet area construction Water proofing of wet areas within a building to comply with AS 3740. Showers in Class 2 and 3 buildings or a Class 4 part must have a concrete or FC sheet structural substrate for floors and concrete, masonry, or FC sheeted walls. Concrete structural substrates for shower floors must be graded to a 1:80 fall, and the membrane directly applied to the structural substrate. The waterproofing requirements for multi-residential buildings also apply to commercial buildings.	No details provided at this stage. It is recommended that a suitably qualified waterproofing consultant is engaged to review all external waterproofing details. This matter to be addressed via detailed architectural drawings & BCA specification.	Compliance Readily Achievable
F2D3	Rooms containing urinals Additional requirements apply including falls to floor wastes and impervious materials surrounding urinals.	No details provided at this stage. It is recommended that a suitably qualified waterproofing consultant is engaged to review all external waterproofing details. This matter to be addressed via detailed architectural drawings & BCA specification.	Compliance Readily Achievable
F2D4	Floor wastes The floor of each bathroom and laundry in each sole occupancy of the Class 2 and 3 building portions must have a floor waste and floors graded to the floor waste at 1:50.	No details provided at this stage. It is recommended that a suitably qualified waterproofing consultant is engaged to review all external waterproofing details. This matter to be addressed via detailed architectural drawings & BCA specification.	Compliance Readily Achievable
Part F3 - Roof and wall cladding			
F3D1	Deemed-to-Satisfy Provisions	Noted	Noted

Clause	Description	Comment	Status
	Where a Deemed-to-Satisfy Solution is proposed, Performance Requirement F3P1 is satisfied by complying with F3D2 to F3D5. Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.		
F3D2	Roof coverings	No details provided at this stage. This matter to be addressed via detailed architectural drawings & BCA specification at CC stage	Compliance Readily Achievable
F3D3	Sarking Sarking type materials used for weatherproofing of roofs and walls must comply with AS/NZS 4200 Parts 1 and 2.	No details provided at this stage. This matter to be addressed via detailed architectural drawings & BCA specification at CC stage.	Compliance Readily Achievable
F3D4	Glazed assemblies Windows, sliding doors with a frame, adjustable louvres, shopfronts and window walls with one piece framing in an external wall must comply with AS 2047 requirements for resistance to water penetration.	No details provided at this stage. This matter to be addressed via detailed architectural drawings & BCA specification at CC stage.	Compliance Readily Achievable
F3D5	Wall cladding External wall cladding must comply with one or a combination of the following: - Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700 - Autoclaved aerated concrete: AS 5146.3. - Metal wall cladding: AS 1562.1.	External wall claddings which are not captured under Clause F3D5 will require a performance solution to be documented by an appropriately qualified practitioner in accordance with <i>Clause A2G2 - Performance Solution</i> .	Compliance Readily Achievable
Part F4 - Sanitary and other facilities			
F4D2	Facilities in residential buildings	Facilities required for a Class 2 & 3 building have been provided demonstrating compliance with the requirements of this Clause F4D2. Each Class 3 SOU has been provided with independent sanitary facilities.	Complies
F4D3	Calculation of number of occupants and fixtures	The sanitary facilities provided throughout the site will determine the persons which can be accommodated, unless a lower number is accommodated in terms of egress with. As discussed previously, the Metro Tenancy and Active Tenancy 1 and 2 are likely to be required to be provided with independent facilities as part of the fit out works. The Class 9b Child care fit-out does not form part of this assessment	Compliance Readily Achievable
F4D4	Facilities in Class 3 to 9 buildings	B1 – EOT facilities have been provided. These sanitary facilities are beyond the	Compliance Readily

Clause	Description	Comment	Status
	Toilet facilities are required in appropriate numbers based on the number of persons accommodated.	DtS requirements for facilities for patrons. (could accommodate up to 100 staff if necessary) Ground Floor- Sanitary facilities have been providing on the Ground Floor which are capable of accommodating 1500 persons (male/female & patrons & staff) Level 02 – Sanitary facilities for staff of hotel can accommodate up to 120 persons. Level 02 – Sanitary facilities for staff of hotel can accommodate up to 60 persons. Level 04- Sanitary facilities not required for patrons of the hotel but could accommodate up to 80 staff. Level 05 of sanitary facilities can accommodate up to 400 persons area which will accommodate the public.	Achievable
F4D5	Accessible sanitary facilities	Refer to 3 rd Party Access Consultant's report.	Noted
F4D6	Accessible unisex sanitary compartments	Refer to 3 rd Party Access Consultant's report.	Noted
F4D7	Accessible unisex showers	Refer to 3 rd Party Access Consultant's report.	Noted
F4D8	Construction of sanitary compartments Where clear space between closet pan and doorway is less than 1.2m, doors must open outwards, slide or be readily removable from outside.	All hinged doors that swing inward to sanitary facilities and do not comply with achieving a 1200mm clearance to pan are required to be installed with lift-off hinges.  The diagram illustrates a door swing within a sanitary compartment. A dashed arc indicates the door's path. A horizontal dimension line at the bottom shows a 'Clear space' of 1200 mm. A vertical dimension line on the right shows a clearance height of 1200 mm from the floor to the top of the door frame.	Compliance Readily Achievable
F4D9	Interpretation: Urinals and washbasins	Each 600mm length of a continuous urinal trough is counted as 1 urinal.	Noted
F4D10	(NSW variation - This clause has deliberately been left blank.)	-	-
F4D11	Waste management	N/A	N/A

Clause	Description	Comment	Status
F4D12	Accessible adult change facilities	Refer to 3 rd Party Access Consultant's report.	Noted
Part F5 - Room heights			
F5D2	Height of rooms and other spaces Generally, a minimum ceiling height of 2.4m is required throughout. In a Class 9b building in a school classroom or other assembly building with more than 100 persons — 2.4m; A public hall or other assembly building with more than 100 persons — 2.7 m In a corridor that serves an assembly building with not more than 100 persons — 2.4 m In a corridor that serves an assembly building with more than 100 persons — 2.7 m;	Compliance has generally been demonstrated on the architectural drawings. The Class 9b parts indicate a floor to ceiling height of 4.5 m. At CC stage, internal elevations are to be provided including RCP's plans which nominate floor to ceiling heights for further assessment.	Compliance Readily Achievable
Part F6 - Light and ventilation			
F6D2	Provision of natural light Natural lighting aggregating 10% of room floor area is required as follows: - To all habitable rooms in residential buildings. - In bedrooms and dormitories of hotels, motels and the like. - To rooms used for sleeping in health care and aged care buildings. - To school classrooms and early childhood centres.	Assessment of the architectural drawings generally demonstrate compliance with F6D2.	Compliance Readily Achievable
F6D3	Methods and extent of natural lighting	Based on a preliminary assessment of the architectural drawings including the elevations window dimensions will allow for 10% opening to that of the floor area of each room.	Compliance Readily Achievable
F6D4	Natural light borrowed from adjoining room	N/A – Borrowed light is not required.	N/A
F6D5	Artificial lighting The artificial lighting system must comply with AS/NZS 1680.0.	Design details and certification from an electrical engineer is required	Compliance Readily Achievable
F6D6	Ventilation of rooms <i>(NSW variation for Public Health Regulation)</i> Ventilation shall be provided throughout the building in by means of natural ventilation complying with Clause F6D7 or mechanical ventilation complying with the requirements of AS1668.2 as required by Clause F6D6 of the BCA.	Design details and certification from a mechanical engineer is required	Compliance Readily Achievable
F6D7	Natural ventilation	The architectural drawings submitted demonstrate suitable openings to provide natural ventilation in accordance with F4.6.	Compliance Readily Achievable
F6D8	Ventilation borrowed from adjoining room	N/A – Borrowed light is not required.	N/A
F6D9	Restriction on location of sanitary compartments	The architectural drawings submitted demonstrate suitable openings to provide	Compliance Readily

Clause	Description	Comment	Status
		natural ventilation in accordance with F4.6. No details of mechanical ventilation to rooms provided at this stage. Mechanical consultant to provide drawings and design certification for further assessment. The location of sanitary compartments denoted on the architectural drawings demonstrate compliance with BCA Clause F6D9	Achievable
F6D10	Airlocks	N/A	N/A
F6D11	Carparks Basement carparks must be provided with a system of mechanical ventilation complying with AS 1668.2	Sufficient details have not been provided at this stage. The mechanical consultant is to provide service drawings and design certification at Construction Certificate stage.	Compliance Readily Achievable
F6D12	Kitchen local exhaust ventilation A commercial kitchen must be provided with a kitchen exhaust hood complying with AS/NZS 1668.1 and AS 1668.2, where: - any cooking apparatus has a total maximum electrical power input exceeding 8kW, or - a total gas power input exceeding 29 MJ/h, or - the total maximum power input to more than one apparatus exceeds 0.5kW electrical power or 1.8 MJ gas per metre square of the room or enclosure.	Sufficient details have not been provided at this stage, however, compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
Part F7 - Sound transmission and insulation			
F7D2	Application of Part Applicable to Class 2, 3 and 9c buildings.	A detailed assessment will need to be undertaken by a qualified acoustic consultant at the Construction Certificate stage to verify compliance.	Compliance Readily Achievable
F7D3	Determination of airborne sound insulation ratings Construction required to have an airborne sound insulation rating must have the value for weighted sound reduction index (R_w) or weighted sound reduction index with spectrum adaptation term ($R_w + C_{tr}$) determined in accordance with AS/NZS1276.1 or ISO717.1 using result from laboratory measurements or comply with Specification 28 of the BCA.	Details in relation to acoustic treatment have not been provided at this stage. Appropriate plans and specification are to be provided. A detailed assessment will need to be undertaken by a qualified acoustic consultant at the Construction Certificate stage to verify compliance.	Compliance Readily Achievable
F7D4	Determination of impact sound insulation ratings A floor required to have an impact sound insulation rating must have the required value for weighted normalised impact sound pressure level with spectrum adaptation term ($L_{n,w}+C_i$) determined in accordance with AS/ISO 717.2 using results from laboratory measurements or comply with Specification 28 of the BCA.	Details in relation to acoustic treatment have not been provided at this stage. Appropriate plans and specification are to be provided. A detailed assessment will need to be undertaken by a qualified acoustic consultant at the Construction Certificate stage to verify compliance.	Compliance Readily Achievable

Clause	Description	Comment	Status
	Walls that are required to have an impact sound insulation rating must be of discontinuous construction.		
F7D5	Sound insulation rating of floors Floors separating sole occupancy units or separating sole occupancy units from a plant room, lift shaft, public corridor, public lobby or the like or parts of different classifications must have an $R_w + C_{tr}$ of not less than 50 and an $L_{n,w} + C_l$ of not more than 62.	Details in relation to acoustic treatment have not been provided at this stage. Appropriate plans and specification are to be provided. A detailed assessment will need to be undertaken by a qualified acoustic consultant at the Construction Certificate stage to verify compliance.	Compliance Readily Achievable
F7D6	Sound insulation rating of walls Walls must have an $R + C_t$ of not less than 50 if it separates sole occupancy units and an R_w of 50 if it separates a sole occupancy unit from a plant room, lift shaft, public corridor, public lobby or the like or parts of different classifications. Compliance with F7D4(2) is required if the wall separates a bathroom, sanitary compartment, laundry or kitchen in one sole occupancy unit from a habitable room (excluding a kitchen) in another adjoining unit or a sole occupancy unit from a plant room or lift shaft. Doors incorporated the walls that separate sole-occupancy units from a stairway, public corridor, public lobby or the like, provided the door assembly has an R_w not less than 30. Where a wall required to have sound insulation has a floor above, the wall must continue to the underside of the floor above or a ceiling that provides the sound insulation required for the wall. Where a wall required to have sound insulation has a roof above, the wall must continue to the underside of the roof above or a ceiling that provides the sound insulation required for the wall.	Details in relation to acoustic treatment have not been provided at this stage. Appropriate plans and specification are to be provided. A detailed assessment will need to be undertaken by a qualified acoustic consultant at the Construction Certificate stage to verify compliance.	Compliance Readily Achievable
F7D7	Sound insulation rating of internal services Services passing through more than one sole-occupancy unit must be separated from the rooms by construction with an $R_w + C_{tr}$ (airborne) not less than: 40 if the adjacent room is a habitable room (other than a kitchen); or 25 if the adjacent room is a kitchen or non-habitable room. Note if a stormwater pipe passes through a sole - occupancy unit it must be separated in accordance with (a) and (b).	Details in relation to acoustic treatment have not been provided at this stage. Appropriate plans and specification are to be provided. A detailed assessment will need to be undertaken by a qualified acoustic consultant at the Construction Certificate stage to verify compliance.	Compliance Readily Achievable
F7D8	Sound isolation pumps A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.	Details in relation to acoustic treatment have not been provided at this stage. Appropriate plans and specification are to be provided. A detailed assessment will need to be undertaken by a qualified acoustic	Compliance Readily Achievable

Clause	Description	Comment	Status
		consultant at the Construction Certificate stage to verify compliance.	
Part F8 - Condensation management			
F8D2	Application of part This part applies to a sole-occupancy unit of a Class 2 building or Class 4 part of a building.	Noted	Compliance Readily Achievable
F8D3	External wall construction Where a pliable building membrane is installed in an external wall it must: • comply with AS/NZS 4200.1; and • be installed in accordance with AS 4200.2; and • be a vapour permeable membrane for climate zones 6, 7 and 8; and • be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building. • For single skin masonry and single skin concrete, where a pliable building membrane is not installed in an external wall, the primary water control layer must be separated from water sensitive materials by a drained cavity.	Sufficient details have not been provided at this stage. Pliable sarking membrane is required to be installed on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building. Except for single skin masonry and single skin concrete, where a pliable building membrane is not installed in an external wall, the primary water control layer must be separated from water sensitive materials by a drained cavity. Suitable architectural drawings and BCA specification are to be provided for further assessment. It is recommended that a facade engineer is engaged to review all external wall details at CC stage	Compliance Readily Achievable
F8D4	Exhaust systems An exhaust system installed in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of— • 25 L/s for a bathroom or sanitary compartment; and • 40 L/s for a kitchen or laundry. Exhaust from a kitchen must be discharged directly or via a shaft or duct to outdoor air. Exhaust from a bathroom, sanitary compartment, or laundry must be discharged— • directly or via a shaft or duct to outdoor air; or • to a roof space that is ventilated in accordance with F6.4.	No mechanical details have been provided at this stage. Mechanical engineer to provide drawings and design certification for further assessment.	Compliance Readily Achievable
F8D5	Ventilation of roof spaces Where an exhaust system covered by F6.3 discharges directly or via a shaft or duct into a roof space, the roof space must be ventilated to outdoor air through evenly distributed openings. Openings required above 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°.	No mechanical details have been provided at this stage. Mechanical engineer to provide drawings and design certification for further assessment.	Compliance Readily Achievable

Clause	Description	Comment	Status
	30% of the total unobstructed area required above must be located not more than 900 mm below the ridge or highest point of the roof space, measured vertically, with the remaining required area provided by eave vents.		
Section G: Ancillary Provisions			
Part G1- Minor Structures and components			
G1P1	Swimming pool drainage	N/A	N/A
G1D2	Swimming pools	N/A	N/A
G1D3	Refrigerated chambers, strong rooms and vaults	Sufficient details have not been provided at this stage. However, compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
G1D4	Outdoor play spaces Any outdoor play space in a Class 9b early childhood centre must be enclosed on all sides with a barrier which complies with AS 1926.1 or, for falls greater than 2m, must comply with the additional requirements of this clause. Note walls, windows and doors may not get a concession if they are within the non-climbable zone of an enclosing barrier.	Sufficient details have not been provided at this stage. However, compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
NSW G1D5	Provision for cleaning windows A safe manner of cleaning windows is to be provided as windows are located 3 or more storeys above ground level.	The windows must either be able to be cleaned wholly from within the building, or a method complying with the Construction Safety Act 1912 and Regulations is required.	Compliance Readily Achievable
Part G2 - Boilers, pressure vessels, heating appliances, fire places, chimneys and flues			N/A
Part G3 - Atrium Construction			N/A
Part G4 - Construction in Alpine Areas			N/A
Part G5 - Construction in Bushfire Prone Areas			N/A
Part G6 - Occupiable outdoor areas			
G6D1	Application of Part Applies to occupiable outdoor areas in addition to other deemed-to-satisfy provisions of the BCA. Part G6 takes precedent where there is a difference to the deemed-to-satisfy provisions of Sections C, D, E, F & G. Except for clause G6D2, Part G6 does not apply to occupiable outdoor areas of individual resident rooms or outdoor occupiable areas less than 10m ² .	Noted Refer to discussions within Sections C, D, E, F and G with regards to compliance.	Noted
G6D2	Fire hazard properties A lining, material or assembly in an occupiable outdoor area must comply with C2D11 as for	The common area room top is considered an Occupiable outdoor area. Proposed materials used in outdoor occupiable areas are subject to C2D11 requirements as this	Compliance Readily Achievable

Clause	Description	Comment	Status
	an internal element. The following fire hazard properties of a lining, material or assembly in an occupiable outdoor area are not required to comply with C2D11: (i) Average specific extinction area. (ii) Smoke-Developed Index. (iii) Smoke development rate. (iv) Smoke growth rate index (SMOGR_{RC})	clause.	
G6D3	Fire separation For the purposes 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.	The common area podium on Level 03 is considered part of Class 2 use, therefore, the carpark located on level 3 is required to be fire separated from the occupiable outdoor area in accordance with BCA Clause C3D8 and C3D9. Architectural drawings including fire compartmentation layout, wall types, required FRLs are to be provided for further assessment.	Compliance Readily Achievable
G6D4	Provision for escape For the purposes of the Deemed-to-Satisfy Provisions of Part D2, a reference to a storey or room includes an occupiable outdoor area.	Egress requirements under Part D2 apply to occupiable outdoor areas.	Compliance Readily Achievable
G6D5	Construction of exits For the purposes of the Deemed-to-Satisfy Provisions of Part D3, a reference to a storey or room includes an occupiable outdoor area.	Construction of exits requirements under Part D3 apply to occupiable outdoor areas.	Compliance Readily Achievable
G6D6	Fire fighting equipment Except for Clause S17C7(2)(a), for the purposes of the Deemed-to-Satisfy Provisions of Part E1, a reference to a storey includes an occupiable outdoor area.	Fire fighting equipment required under Part E1 to be designed to include occupiable outdoor areas.	Compliance Readily Achievable
G6D7	Lift installations For the purposes of the Deemed-to-Satisfy Provisions of Part E3, a reference to a storey includes an occupiable outdoor area.	Lift designs required under Part E3 to be designed to include occupiable outdoor areas.	Compliance Readily Achievable
G6D8	Visibility in an emergency, exit signs and warning systems For the purposes of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area.	Emergency lighting, exits signs and emergency warning and intercom systems to be designed to include occupiable outdoor areas.	Compliance Readily Achievable
G6D9	Light and ventilation For the purposes of the Deemed-to-Satisfy Provisions of F6D5, F6D9 and F6D10, a reference to a room includes an occupiable outdoor area.	N/A	N/A
G6D10	Fire orders For the purposes of the Deemed-to-Satisfy Provisions of G4D8, a reference to a storey includes an occupiable outdoor area.	N/A	N/A
Part G7 - Livable housing design			N/A
Section I: Special use buildings			N/A

Clause	Description	Comment	Status
	Part I1 - Class 9b buildings		N/A
	Part I2 - Public Transport Buildings		N/A
	Part I3 - Farm buildings and farm sheds		N/A
	NSW Part I4 - Entertainment venues other than temporary structures and drive-in theatres		N/A
	NSW Part I5 Temporary structures		N/A
	NSW Part I6 Drive-in theatres		N/A
NSW Section J: Energy Efficiency Energy Efficiency for buildings requires buildings to reduce greenhouse gas emissions by efficiently using energy. A building's services must have features that facilitate the efficient use of energy. The discipline of Energy Efficiency with the BCA has become a specialised field where compliance with BCA Section J is to be certified with the issue of a Certificate of Compliance - Design from the relevant Services Engineer/Consultant. The purpose of this section is to provide a brief explanation of which areas are to achieve compliance with BCA Section J - Energy Efficiency during design and construction. The BCA should be referenced for exact requirements, clarification and further explanation. A third party ESD consultant is to be engaged to assess the provisions relation to Section J Energy Efficiency.			



14. Appendix A - Referenced Documentation

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

Drawing No.	Title	Issue	Date	Drawn By
PTW-DA-A100010	DEVELOPMENT DATA	A	22.04.24	PTW
PTW-DA-A200020	DEMOLITION PLAN	A	22.04.24	PTW
PTW-DA-A200030	SITE ANALYSIS PLAN	A	22.04.24	PTW
PTW-DA-A200040	SITE PLAN	A	22.04.24	PTW
PTW-DA-A200050	LOCATION PLAN	A	22.04.24	PTW
PTW-DA-A200060	CONTEXT PLAN	A	22.04.24	PTW
PTW-DA-B1B2010	BASEMENT 02 PLAN	A	22.04.24	PTW
PTW-DA-B1B3010	BASEMENT 01 PLAN	A	22.04.24	PTW
PTW-DA-B1GRD10	GROUND PLAN	A	22.04.24	PTW
PTW-DA-B1L0110	LEVEL 01 PLAN	A	22.04.24	PTW
PTW-DA-B1L0210	LEVEL 02 PLAN	A	22.04.24	PTW
PTW-DA-B1L0310	LEVEL 03 PLAN	A	22.04.24	PTW
PTW-DA-B1L0410	LEVEL 04 PLAN	A	22.04.24	PTW
PTW-DA-B1L0510	LEVEL 05 PLAN	A	22.04.24	PTW
PTW-DA-B1L0610	LEVEL 06-18 PLANS	A	22.04.24	PTW
PTW-DA-B1L1910	LEVEL 19 PLAN	A	22.04.24	PTW
PTW-DA-B1L2010	LEVEL 20-23 PLANS	A	22.04.24	PTW
PTW-DA-B1ROF10	ROOF PLAN	A	22.04.24	PTW
PTW-DA-B1TYP10	TYPICAL RESIDENTIAL PLANS BUILDING B	A	22.04.24	PTW
PTW-DA-B1TYP11	TYPICAL RESIDENTIAL PLANS BUILDING C	A	22.04.24	PTW
PTW-DA-C110010	NORTH ELEVATION	A	22.04.24	PTW
PTW-DA-C120010	EAST ELEVATION	A	22.04.24	PTW
PTW-DA-C130010	SOUTH ELEVATION	A	22.04.24	PTW
PTW-DA-C140010	WEST ELEVATION	A	22.04.24	PTW
PTW-DA-C150010	TOWER C EAST & NORTH ELEVATIONS	A	22.04.24	PTW
PTW-DA-C160010	TOWER B NORTH ELEVATION / TOWER C SOUTH ELEVATION	A	22.04.24	PTW
PTW-DA-C170010	STREETSCAPE ELEVATION EAST/WEST	A	22.04.24	PTW
PTW-DA-C180010	STREETSCAPE ELEVATION NORTH/SOUTH	A	22.04.24	PTW
PTW-DA-C200010	MATERIALS & FINISHES	A	22.04.24	PTW
PTW-DA-D110010	SECTION 1	A	22.04.24	PTW
PTW-DA-D110020	SECTION 2	A	22.04.24	PTW
PTW-DA-D110030	SECTION 3	A	22.04.24	PTW
PTW-DA-Q310010	GFA DIAGRAMS	A	22.04.24	PTW
PTW-DA-Q310020	GFA DIAGRAMS	A	22.04.24	PTW



15. Appendix B - Statutory Fire Safety Measures

Schedule of Statutory Fire Safety Measures

Measure	Standard of Performance
Access Panels, Doors and Hoppers to Fire Resisting Shafts	BCA 2022 Clause C4D14 and tested prototypes (AS 1530.4 - 2014)
Automatic Fail-Safe Devices	Scheduled devices release upon trip of smoke detection, fire detection and sprinkler activation in accordance with BCA 2022 Clause D3D26.
Automatic Fire Detection and Alarm System (Smoke Detection System)	BCA 2022 S20C4 and AS 1670.1 - 2018
Automatic Fire Detection and Alarm System (Smoke Detection System to Operate Zone Smoke Control or Stair Pressurisation System)	BCA 2022 S20C6 and AS 1670.1 - 2018
Automatic Fire Detection and Alarm System (Smoke Detection System to Automatically Shutdown Air-Handling System)	BCA 2022 S20C6 and AS 1670.1 - 2018
Automatic Fire Detection and Alarm System (Smoke Detection System to Activate Smoke Exhaust System)	BCA 2022 S20C6 and AS 1670.1 - 2018
Automatic Fire Suppression Systems (Combined Sprinkler and Hydrant System)	BCA 2022 Specification 17 and AS 2118.6 - 2012
Emergency Lifts	BCA 2022 Clause E3D5
Emergency Lighting	BCA 2022 Clause E4D2, E4D4 and AS/NZS 2293.1 - 2018
Emergency Warning and Intercommunication System	BCA 2022 Clause E4D9, Specification 31 and AS 1670.4 - 2018
Exit Signs	BCA 2022 Clause E4D5, NSW E4D6, E4D7, E4D8 and AS/NZS 2293.1 - 2018
Fire Alarm Monitoring System	BCA 2022 S20C8 and AS 1670.3 - 2018
Fire Control Room	BCA 2022 Specification 19
Fire Dampers	BCA 2022 Clause C4D15 and AS 1668.1 - 2015 (AS 1682.1 - 2015 and AS 1682.2 - 2015)
Fire Doors	BCA 2022 Specification 12 and AS/NZS 1905.1 - 2015
Fire Hydrants Systems	BCA 2022 Clause E1D2 and AS2419.1-2021
Fire Seals Protecting Opening in Fire Resisting Components of The Building	BCA 2022 Clause C4D15, Specification 13, AS 1530.4 - 2014, AS 4072.1 - 2005 and installed in accordance with the tested prototype.
Hose Reel System	BCA 2022 Clause E1D3 and AS 2441 - 2005
Lightweight Construction	BCA 2022 Specification 6, Clause A2G3 and AS 1530.4 - 2014
Mechanical Air Handling System (Automatic Shut Down of Air-Handling System)	BCA 2022 Clause E2D3 and AS 1668.1 - 2015
Mechanical Air Handling System (Air-Handling System Design to Operate as A Smoke Control System)	BCA 2022 Clause E2D3 and AS 1668.1 - 2015
Mechanical Air Handling System (Automatic Air Pressurisation System)	BCA 2022 Clause E2D4, E2D8, E2D9 and AS 1668.1 - 2015



Measure	Standard of Performance
Mechanical Air Handling System (<i>Zone Smoke Control System</i>)	BCA 2022 Clause E2D6, E2D7, E2D9, E2D11, E2D13 and AS 1668.1 - 2015
Mechanical Air Handling System (<i>Carpark Mechanical Ventilation System</i>)	BCA 2022 Clause E2D12, Clause 5.5 of AS/NZ 1668.1 - 2015 and fans with metal blades suitable for operation at normal temperature may be used and the electrical power and control cabling need not be fire rated
Mechanical Air Handling System (<i>Automatic Smoke Exhaust System</i>)	BCA 2022 Specification 21
Perimeter Vehicle Access for Emergency Vehicles	BCA 2022 Clause C3D5
Portable Fire Extinguishers	BCA 2022 Clause E1D14 and AS 2444 - 2001
Wall Wetting Sprinkler and Drencher Systems	BCA 2022 Clause C4D5, Specification 31
Warning And Operational Signs	BCA 2022 Clauses D2D22, NSW D3D24, D3D28, D4D7 E3D4, E3D11, E3D12, and Specification 14

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



16. Appendix C2D2 - Fire Rating Requirements

16.0. Type A Construction

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

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

Table 2 S5C11b: Type A construction: FRL of non-loadbearing parts of external walls

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

Table 3 S5C11c: Type A construction: FRL of external columns not incorporated in an external wall

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

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

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

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

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

Table 6 S5C11f: Type A construction: FRL of non-loadbearing internal walls

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

Table 7 S5C11g: Type A construction: FRL of other building elements not covered by Tables S5C11a to S5C11f

Building element	FRL (in minutes): <i>Structural adequacy / Integrity / Insulation</i>			
	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



17. Appendix C2D10 - Non-combustible building elements

(1) In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible:

- (a) External walls and common walls, including all components incorporated 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.

(2) 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) a building required to be of Type A construction; and
- (b) a building required to be of Type B construction, subject to C3D11, in—
 - (i) a Class 2, 3 or 9 building; and
 - (ii) a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys.

(3) A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shaft, must comply with Specification 5.

(4) The requirements of (1) and (2) do not apply to the following:

- (a) Gaskets.
- (b) Caulking.
- (c) Sealants.
- (d) Termite management systems.
- (e) Glass, including laminated glass, and associated adhesives, including tapes.
- (f) Thermal breaks associated with—
 - (i) glazing systems; or
 - (ii) external wall systems, where the thermal breaks—
 - (A) are no larger than necessary to achieve thermal objectives; and
 - (B) do not extend beyond one storey; and
 - (C) do not extend beyond one fire compartment.
- (g) Damp-proof courses.
- (h) Compressible fillers and backing materials, including those associated with articulation joints, closing gaps not wider than 50 mm.
- (i) Isolated—
 - (i) construction packers and shims; or
 - (ii) blocking for fixing fixtures; or
 - (iii) fixings, including fixing accessories; or
- (iv) acoustic mounts.
- (j) Waterproofing materials applied to the external face, used below ground level and up to 250 mm above ground level.
- (k) Joint trims and joint reinforcing tape and mesh of a width not greater than 50 mm.
- (l) Weather sealing materials, applied to gaps not wider than 50 mm, used within and between concrete elements.
- (m) Wall ties and other masonry components complying with AS 2699 Part 1 and Part 3 as



appropriate and associated with masonry wall construction.

(n) Reinforcing bars and associated minor elements that are wholly or predominately encased in concrete or grout.

(o) A paint, lacquer or a similar finish or coating.

(p) Adhesives, including tapes, associated with stiffeners for cladding systems.

(q) Fire-protective materials and components required for the protection of penetrations.

(5) The following materials, when entirely composed of itself, are non-combustible and may be used wherever a non-combustible material is required:

(a) Concrete.

(b) Steel, including metallic coated steel.

(c) Masonry, including mortar.

(d) Aluminium, including aluminium alloy.

(e) Autoclaved aerated concrete, including mortar.

(f) Iron.

(g) Terracotta.

(h) Porcelain.

(i) Ceramic.

(j) Natural stone.

(k) Copper.

(l) Zinc.

(m) Lead.

(n) Bronze.

(o) Brass.



18. Appendix C2D11 - Early Fire Hazard Properties for Materials

Floor materials, floor coverings and wall and ceiling lining materials are required to comply with BCA prescribed fire hazard properties and AS5637.1-2015

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

Wall Linings and Ceiling Linings	
Generally	Variously Group 1, 2, or 3 materials (more restrictive Group number for non-sprinklered areas, public corridors, health care corridors and other prescribed locations) when tested to AS/ISO 9705 or clause 3 of BCA Spec A2.4 and AS/NZ 3837
Fire Isolated Exits	Group 1 material when tested as above
Lift Cars	Group 1 or 2 materials when tested as above

In addition, in non-sprinklered areas, wall and ceiling linings must have a smoke growth rate index not more than 100 or an average specific extinction area less than 250m²/g.

Other than above, construction materials generally need to achieve as1530.3 early fire hazard indices requirements as follows:	
Generally	Spread of flame Index not > 9 Smoke developed index not > 8
Sarking	Flammability Index not > 5
Fire Isolated Exits and Fire Control Rooms	Spread of Flame Index 0 Smoke Developed Index not > 2 Sarking Flammability 0
Non Fire Isolated Stairs & Escalators and Auditorium Fixed Seating	Spread of Flame Index 0 Smoke Developed Index not > 5
Lifts	To AS 1735.2
Air Ducts	To AS4254



19. Appendix D3D29 - Protection of Openable Windows

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

