STEVE WATSON
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Site A – 32 Hume Street, Crows Nest NSW 2065

Crows Nest Metro Over Station Development (Site A) – Amending Concept SSDA - SSDA#: SSD-75662958

BCA Assessment Report

Report 2024/1243.01 R1.1

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Revision History

Revision No:	Date:	Revision Details:	Author:	Verifier:
R1.0	Friday, 1 November 2024	Draft Report – for review	John Khoury	Josh Harvey
R1.1	Wednesday, 26 February 2025	Final Report – for DA submission (Amending Concept SSDA)	John Khoury	Josh Harvey

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 Site A – 32 Hume Street, Crows Nest NSW 2065 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 apartments, retail shops, bar, loading dock and gym.
Class of Occupancy	Class 2, 6, 7b, and 9b
Type of Construction Required	Type A
Rise Storeys:	26
Number of Storeys:	27
Effective Height:	88.350m (Level 00 RL87950 - Level 26 RL #176300)

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 15 of the report and should be resolved prior to construction.

Key issues which require additional details and issues requiring a Performance Solution have been listed under Section 11 of this report and need to be clarified with SWP or the building certifier for the project prior to the issue of a construction certificate.

CONTENTS

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

1. Introduction

This report presents the findings of a preliminary assessment undertaken of the proposed design of the Over Station Mixed-use Development consisting of 474 residential apartments, combined levels of retail, gym and amenity spaces across 5 floors and across three residential towers and rooftop bar at Site A – 32 Hume Street against the Deemed-to-Satisfy (DtS) provisions of Building Code of Australia BCA 2022.

This report has been prepared by Steve Watson and Partners for Thirdi

2. Site Description

The subject site, referred to as Crows Nest Over Station Development (Site A), is located within Crows Nest and within the North Sydney Local Government Area (LGA). The site is located at 32 Hume Street, Crows Nest. The site is located directly above and adjacent to the operational Crows Nest Metro Station.

The site comprises the entirety of the block and is bound by Pacific Highway to the west, Hume Street to the south, Clarke Lane to the east, and Oxley Street to the north. It is 3,879m2 in size legally referred to as Lot 2 of DP1296669. It is noted that Lot 1 of DP1296669 relates to the Crows Nest Metro Station intertwines with Lot 2 (Site A) on some levels.

The use as described under SSDA SSD-75662958 is listed within the below table.

Component	Use under Amending Concept SSDA
Uses	Mixed-use residential development with affordable housing and commercial/retail components. Residential component comprises: • Tower 1 and 2 - Build to rent apartments. • Tower 3 - Affordable housing apartments. Commercial/retail components located over lower ground to level 3. Rooftop bar on Tower 1.

Note, refer to the Executive Summary and Clause-by-Clause BCA Assessment under Section 15 of this report for the uses applicable under the BCA for this assessment.

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, construction certification to be issued under Part 6 of the NSW Environmental Planning and Assessment Act 1979 No 203, Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 and Environmental Planning and Assessment Regulation 2021.

This report is a 'Building Code of Australia Compliance Report' to support the submission of the Crows Nest OSD Site A - Amending Concept SSDA (SSD-75662958).

Issue and Assessment Requirements (SSD-75662958)	Documentation
Item 4: • Assess how the development complies with the relevant accessibility requirements.	• Building Code of Australia Compliance Report • Accessibility Report

4. Scope and Limitations

4.1. Scope

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

4.2. Limitations

The following limitations apply to the assessment:

- The report considers matters of a significant nature only and should not be considered exhaustive.
- The plans are assessed to the extent necessary to issue a 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.

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
Alts and adds - no change in use	EPAR (DCFS) S14(3)	No reduction in the level of safety permitted
New Work	EPAR (DCFS) S19	All new works must comply
Access to premises	Disability (Access to Premises — Buildings) Standards 2010	Upgrade of the "Affected Part" to provide access for people with disabilities
Residential Flat Development	EPAR (DCFS) S15 & S43	Statement from a qualified designer verifying compliance with SEPP (Housing) 2021 for residential developments
BASIX	EPAR (DCFS) S10	BASIX certificate required for residential projects

7.1. New Work

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

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

7.2. No change of building use - structural strength and fire safety

Section 14(3) of the EPAR (DCFS) prevents a certifying authority from issuing a construction certificate if the proposed new work will result in a reduction to the fire protection and structural capacity of the building.

7.3. Access to premises

The Disability (Access to Premises - Buildings) Standards came into force via BCA2011 throughout Australia on 01 May 2011, and with it introduced a higher standard of access to that required by previous versions of the BCA. In prescribed circumstances, the legislation requires upgrade of access and facilities for persons with disabilities when building work is proposed. In particular, unless works are undertaken by a lessee who does not lease the entire building, proposed building work anywhere in the building could trigger a need for enhanced access at the main building pedestrian entry and from that entry to all areas of the building that are subject to the building work.

7.4. 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 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 the State Environmental Planning Policy (Housing) 2021 prior to issuing an Occupation Certificate.

One means of ensuring compliance with the certification requirement is to obtain a construction certificate in relation to the works.

7.5. 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

8.1. 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. Description of Proposed Development

The proposed development involves the construction of the Over Station Mixed-use Development across three residential towers.

The development is located at 32 Hume Street, Crows Nest.

10. Assessment Data Summary

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

10.1. Assumptions

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

1. It is assumed that a fire engineered strategy is being pursued to maintain consistency with the base building fire engineering report. This includes but not limited to stair pressurisation and fire separation of the station from the proposed Over Site Development. The fire engineer will need to confirm this within their report.
2. Population numbers assessed under F4D4 are based on the provided sanitary facilities.

10.2. Interpretations

The following interpretations have been made in preparation of this report:

3. Currently the void connecting the shared lobby to level 2 has not been determined as an atrium. Detailed section of this area is required to be provided for further assessment as it has significant impacts of the project in terms of fire safety.

11. Issues Requiring Resolution

11.1. Issues requiring amendments to plans, additional details or documentation.

The following issues either need to be resolved or require further details and/or documentation to be provided to ensure compliance before issuing the Construction Certificate.

Item	DTS Clause	Description	Requirement to Satisfy BCA
a)	C4D4	Separation of external walls and associated openings in different fire compartments	The following openings are within the distances specified in Table C4D4, are required to be protected in accordance with Clause C4D5 and within an external achieving an FRL no less than 60/60/60:

Item	DTS Clause	Description	Requirement to Satisfy BCA
			Ground Level: • Retail 04 – Southern window. • Retail 05 – Northern window. • AFH lobby – Doorway and fixed glazed window. Level 2: • Gym – The southern gym compartment glazing serving the reception void is within 3m of the northern compartment. Level 3: • Tower 3 AFH – Eastern windows within 4m of the Community Exchange compartment. Details of compliance are to be illustrated on the wall type, window and door schedules or alternatively it is to be confirmed by the fire engineer whether this is being addressed as part of the Fire Engineered Performance Solution Report.
b)	D2D17	Non-required stairways, ramps or escalators	It has been assumed that the stairway serving the gymnasium does not connect more than 3 storeys. Please provide internal section including details of what is proposed at the stairway landing at mezzanine level. It is recommended that the stairway landing is provided with a balustrade in lieu of an enclosing wall.
c)	D3D25	Swinging doors	The alternative exit serving the shared lobby must swing in the direction of travel. Updated drawings illustrating compliance are to be provided as part of Design Development.
d)	E1D2	Fire hydrants	The pump room does not have a door which leads directly to a fire isolated passageway or stair leading to a road or open space. Also, the T1 stairs relies on the connection to the podium 2 fire stair to lead to a road/open space. The fire engineer is to confirm whether this is feasible to address through a performance solution.
e)	E1D4	Sprinklers	The sprinkler pump room/enclosure and sprinkler alarm valves are not located to have direct egress to a road or open space, as required. The fire engineer is to confirm whether this is feasible to address through a Performance Solution. Otherwise, the architectural drawings are to be updated to illustrate a sprinkler pump room/enclosure which has direct egress to road or open space.
f)	F4D4	Facilities in Class 3 to 9 buildings	Refer to appendix F4D4 of this report.

Item	DTS Clause	Description	Requirement to Satisfy BCA
			The following populations have been assumed for the café/restaurant: • Retail 01 = 50 patrons with 10 staff. • Retail 02 = 60 patrons with 10 staff. • Retail 03-05 = 200 patrons with 20 staff. • Rooftop bar = 200 patrons including 20 staff. The following shortfalls have been noted: • Retail 01 = x1 urinal. Note 1 - This is on the basis that Retail 03-05 share sanitary facilities, as requested. The architectural plans are to be updated to illustrate the additional x1 urinal.
g)	Part G3	Atrium Construction	Currently the void connecting the shared lobby to level 2 has not been determined as an atrium. Detailed section of this area is required to be provided for further assessment as it has significant impacts of the project in terms of fire safety Please provide internal section including details of what is proposed at the stairway landing at mezzanine level. It is recommended that the stairway landing is provided with a balustrade in lieu of an enclosing wall.

11.2. Fire Engineered Performance solutions required.

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

Item	Non-Compliance	DTS Clause	Description	Performance Requirement
1.	Separation by fire walls	C3D8, Spec. 5	It is to be confirmed whether the inclusion of cavity barriers will form part of a fire engineering performance solution due to availability of tested systems in the market.	C1P1, C1P2
2.	Separation of classifications in the same storey and different storeys and fire-resistance of building elements	C3D9, C3D10, S5C11	A performance solution is proposed to permit reduced FRL's to 120/120/120 in the following areas: • Lower Ground Level: Waste storage and retail. • Ground Level: Retail. • Mezzanine: Bicycle parking/storage. Level 2: Bicycle parking/storage. • Roof: Bar.	C1P1, C1P2
3.	Public corridors in Class 2 & 3 buildings	C3D15	A performance solution is required to omit the provision of smoke-proof walls at 40m intervals to the public corridor within the level 3 resident amenity.	C1P4
4.	Enclosure of shafts	S5C8	It is proposed to have a waste chute discharge	C1P1, C1P2

Item	Non-Compliance	DTS Clause	Description	Performance Requirement
			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 Construction Certificate stage to assess the feasibility of a Performance Solution to vary the DtS requirements of the BCA.	
5.	Bounding construction: Class 2 and 3 buildings and Class 4 parts	C4D12	The residential amenity spaces on levels 2 and 3 are deemed part of the Class 2 building classification. A performance solution is required to permit the omission of fire separation and bounding construction into public corridors.	C1P1, C1P2
6.	Number of exits required	D2D3	A performance solution is required to permit access to an alternative exit from the level 2 bicycle storage to pass through an SOU (Level 2 Gym).	D1P4, E2P2
7.	Exit travel distances	D2D5	The nominated exits in the building are listed in appendix D2D5 of the report. The following areas have been identified with distances exceeding the required distance for a point of choice and require a performance solution: • Class 7b - Mezzanine level: 25m in lieu of 20m. • Class 9b - Level 1 Pool: 28m in lieu of 20m. • Class 2 - AFH T3 levels 3-10: 10m in lieu of 6m. • Class 2 – AFH T3 Level 11: 25m in lieu of 20m.	D1P4, E2P2
8.	Distance between alternative exits	D2D6	A performance solution is required to permit the T3 fire stairs to have a distance between alternative exits at 4.8m in lieu of 9m, within the follow areas: • Mezzanine: T3 fire stairs. 4.8m in lieu of 9m. • Levels 1-2 – Gym: T3 fire stairs. 4.8m in lieu of 9m. • Levels 3 – 11 – AFH: T3 fire stairs. 4.8m in lieu of 9m. A performance solution is required to permit to permit travel distance between alternative exits at 64m in lieu of 60m, within the level 3 waste/moving strategy compartment.	D1P4, E2P2

Item	Non-Compliance	DTS Clause	Description	Performance Requirement
9.	Travel via fire-isolated exits	D2D12	A performance solution is required to permit the fire-isolated passageways to discharge into: • A covered area which is not open for at least 1/3 of its perimeter and; • Has a distance to an open space at 8m in lieu of 9m; and • A path within 6m of an external wall and openings which are not protected per C4D5	D1P4, D1P5, E2P2
10.	Travel via fire-isolated exits	D2D12	A performance solution is required to permit the fire control room to open into the fire-isolated-passageway without a Deemed-to-Satisfy airlock.	D1P5, E1P6
11.	Travel via fire-isolated exits	D2D12	A performance solution is required to permit the following: • T1 and podium 2 fire-isolated-stairways to not provide independent egress by their own fire-isolated passageway. • T2 and podium fire-isolated-stairways to not provide independent egress by their own fire-isolated passageway.	D1P4, D1P5, E2P2
12.	Discharge from exits	D2D15	A performance solution is required to permit the discharge points of alternative exits not being located as far apart as practical.	D1P4, D1P5, E2P2
13.	Separation of rising and descending stair flights	D3D5	A performance solution is needed to permit the direct connection between rising and descending stair flights from the following areas: • T1 and podium 2 fire stairs. • T2 and podium fire stairs.	D1P4, D1P5, E2P2
14.	Provisions for special hazards	E1D17, E2D21	The solar panels installed to the roof top of all three towers are a special hazard and requires a separate assessment from a fire engineer.	C1P2
15.	Fire hydrants	E1D2	A performance solution is required to permit the fire brigade booster to be located 35m from the principal entry in lieu of 20m as required by clause 7.3 of AS2419.1. It is also recommended for the fire engineer to consider the multiple pedestrian entries on a performance basis.	E1P3
16.	Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings	E2D6	A performance solution is required to permit the omission of a zone pressurisation system between vertically separated fire compartments in accordance with AS1668.1.	E2P2
17.	Swimming pools	G1D2	A performance solution is required to permit the level 1 pool to be provided without a suitable barrier in accordance with AS 1926.1 and AS 1926.2.	

11.3. BCA Performance solutions required

Item	Non-Compliance	DTS Clause	Description	Performance Requirement
18.	Facilities in Class 3 to 9 buildings	F4D4	A performance solution is required to justify the number of sanitary facilities and showers serving the gym on levels 1 -2.	F4P1
19.	Natural light borrowed from adjoining room	F6D4	A performance solution is required to assess the shortfall of natural lighting to the study areas throughout the proposed development.	F6P2
20.	Swimming pool drainage	G1P1	The swimming pool must have adequate means of draining the pool in a manner which will not – • cause illness to people; or • affect other property. A performance solution is required to address the requirements of GP1.1, which has no Deemed-to-Satisfy provisions.	G1P1
21.	Swimming pools	G1D2	A performance solution is required to permit the level 1 pool to be provided without a suitable barrier in accordance with AS 1926.1 and AS 1926.2.	G1P2

12. 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.

13. 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.

14. 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.

15. BCA 2022 - Clause by Clause Assessment

<table>
<tr><th>Clause</th><th>Description</th><th>Comment</th><th>Status</th></tr>
<tr><td colspan="2">BCA Version</td><td></td><td></td></tr>
<tr><td>BCA 2022</td><td>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.</td><td>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>Description</th></tr><tr><td>Section</td><td>Refers to the applicable section of the NCC.

e.g., Section D - Access and egress

Section lettering will mostly stay as per previous editions of the National Construction Code.</td></tr><tr><td>Part</td><td>Part identifies the part of the applicable section.

e.g., Part D2 - Provisions for escape.</td></tr><tr><td>Type</td><td>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>Clause refers to the number within the Type group.</td></tr></table></td><td>Noted</td></tr>
<tr><td colspan="2">Section A: General Provisions</td><td></td><td></td></tr>
<tr><td>A5G3</td><td>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.</td><td>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.</td><td>Noted</td></tr>
<tr><td>Part A6</td><td>Classification and usage
Usage on each level of the building is as follows:
LEVEL USE CLASS</td><td>-</td><td>Noted</td></tr>
</table>

Clause	Description			Comment	Status
	Lower Ground	Retail and loading dock.	6, 7b		
	Ground	Retail and gym.	6, 9b		
	Mezzanine	Bicycle storage and plant.	7b		
	Level 1	Gym	9b		
	Level 2	Gym and resident amenity	2, 9b		
	Level 3	Residential units, resident amenity and waste rooms.	2		
	Level 4 – 25	Residential units.	2		
	Level 26	Resident outdoor amenity and roof top bar.	2, 6		
Part A7	**United buildings** Buildings are deemed united when two or more buildings adjoining each other are connected and used as one building.			The three residential towers are connected to the proposed lower-level retail, gym and amenity spaces which are also connected to the existing metro. These buildings are to comply as though they are a single building.	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 will need to be provided 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. The building has an importance level 3 in accordance with Table B1D3a.			Certification from a qualified structural engineer will need to be provided 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 will need to be provided 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 with the ABCB Protocol for Structural Software.			-	Compliance Readily Achievable
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.			Civil engineer to confirm whether the building is located within a flood hazard area and compliance with this clause.	Compliance Readily Achievable

Clause	Description	Comment	Status
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.	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. Large scale 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 must be provided for assessment at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
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:** Rise in storeys: 26 storeys Effective Height: 88.35m	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
C2D6	**Two storey Class 2, 3 or 9c buildings**	-	N/A
C2D7	**Class 4 parts of buildings**	-	N/A
C2D8	**Open spectator stands and indoor sports stadiums**	-	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 protype. Product codes should be noted on the wall type schedule and corresponding test reports provided for review at Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	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: I. External walls and common walls, including all components incorporated within them including façade covering, framing and insulation; II. The flooring and floor framing of lift pits; III. Non-loadbearing internal walls where they are required to be fire-resisting; IV. 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. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
C2D11	**Fire hazard properties** *(NSW variation for Entertainment Venues)* 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	Compliance Readily Achievable

Clause	Description	Comment	Status
		• Carpark soffit insulation fire test reports, based on 'room fire testing' will be required to meet fire brigade consent conditions if applicable. Compliance is readily achievable subject to a schedule of internal finishes and corresponding fire hazard test data for all combustible internal linings are provided for review at Construction Certificate stage.	
C2D12	**Performance of external walls in fire**	-	N/A
C2D13	**Fire-protected timber: Concession**	-	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.	A schedule of external wall ancillary elements along with their corresponding test reports are to be provided as part of the Construction Certificate stage.	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.	The Architect, Facade and Structural Engineers are to make provisions for this requirement in the design. The structural fixing details along with corresponding test reports are to be provided by the structural engineer and façade engineer as part of the Construction Certificate stage.	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.	Applicable
C3D3	**General floor area and volume limitations (Type A construction)** The floor area and volume limitations are: Class 5, 9b or 9c: 8,000m^2 and 48,000m^3 Class 6, 7, or 9a: 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.	The floor area and volume of the largest fire compartment in the building does not exceed the maximum limitations outlined by Table C3D3. The largest fire compartment has been noted as the gymnasium (Ground Level – Level 2) at 2400m^2.	Complies
C3D4	**Large isolated buildings**	-	N/A
C3D5	**Requirements for open space and vehicular access**	-	N/A
C3D6	**Class 9 buildings**	-	N/A
C3D7	**Vertical separation of openings in external walls**	-	N/A

Clause	Description	Comment	Status
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.	All fire walls shall be constructed in accordance with BCA Clause C3D8 when separating fire compartments The project fire engineer will need to confirm whether the proposed design maintains consistency with the base building fire engineering report, as part of design development. In particular, the allowance to fire separate the station from the future OSD towers (in lieu of united buildings).	Compliance Readily Achievable
		Large scale sections and the latest wall schedule are required to be provided for assessment, at the Construction Certificate stage. This will need to illustrate the 120/120/120 separation between the two gym fire compartments on level 2.	Compliance Readily Achievable
		Large scale sections and the latest wall schedule are required to be provided for assessment, at the Construction Certificate stage. This will need to illustrate the 240/240/240 separation between the waste/holding area from the resident amenities on Level 3.	Compliance Readily Achievable
		Large scale sections and slab edge details are to be provided to illustrate the fire separation of the slab edge both at the horizontal and vertical junctions, separating apartments as part of the Construction Certificate Stage. As part of design development, it is to be confirmed whether the inclusion of cavity barriers will form part of a fire engineering performance solution due to availability of tested systems in the market.	Performance Solution
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.	A performance solution is proposed to permit reduced FRL's to 120/120/120 in the following areas: • Lower Ground Level: Waste storage and retail. • Ground Level: Retail. • Mezzanine: Bicycle parking/storage. • Level 2: Bicycle parking/storage. • Bar.	Performance Solution

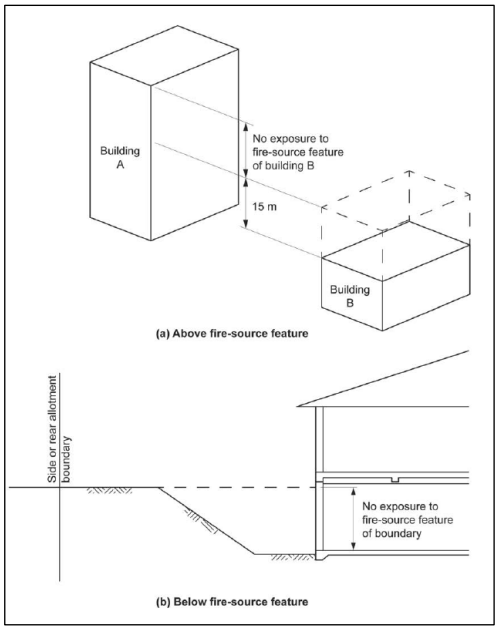
Clause	Description	Comment	Status
		Large scale sections and the latest wall schedule are required for review, at the Construction Certificate stage This will need to illustrate the 240/240/240 separation between the waste/holding area from the resident amenities on Level 3.	Compliance Readily Achievable
		The base building fire engineering report notes that the lower ground shared loading zone must be separated by 240/240/240 construction. Any changes to the proposed development must maintain compliance with this requirement. This will need to be noted on the wall schedule and structural/architectural plans being provided for assessment at Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
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.	A performance solution is proposed to permit reduced FRL's to 120/120/120 in the following areas: • Lower Ground Level: Waste storage and retail. • Ground Level: Retail. • Mezzanine: Bicycle parking/storage. • Level 2: Bicycle parking/storage.	Performance Solution
		The structural engineer will need to confirm that the slab separating the level 4 residential apartments from the level 3 waste/holding areas achieve an FRL of 240/240/240 and detail compliance on their drawings being submitted at Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
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.	The lift specification is required to illustrate compliance with this clause and to be provided for assessment at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
C3D12	**Stairways and lifts in one shaft**	The lifts are within their own shaft	Complies
C3D13	**Separation of equipment** 2hr fire separation is required for: • Lift motor rooms.	The services engineer is to confirm the proposed equipment within the plant room on the mezzanine floor.	Compliance Readily Achievable

Clause	Description	Comment	Status
	• 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. Separation of on-site fire pumps must comply with the requirements of AS 2419.1.	This would determine whether 120/120/120 fire separation is required. Compliance is readily achievable subject to detailed design development.	
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 on the lower ground level and the main switch room (MSR) on the mezzanine floor must be separated by 120/120/120 construction. The wall type schedule and door schedule must detail compliance in accordance with this clause and to be provided at Construction Certificate stage Compliance is readily achievable subject to detailed design development.	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.	A performance solution is required to omit the provision of smoke-proof walls at 40m intervals to the public corridor within the level 3 resident amenity.	Performance Solution
Part C4 - Protection of Openings			
C4D2	**Application of Part**	-	Applicable
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 $^1/_3$ of the external wall of the storey in which it is located.	-	Noted

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. **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	The following openings are within the distances specified in Table C4D4, are required to be protected in accordance with Clause C4D5 and within an external achieving an FRL no less than 60/60/60: Ground Level: • Retail 04 – Southern window. • Retail 05 – Northern window. Unless the screening adjacent to the landscaping achieves an FRL for the height of the opening. • AFH lobby – Doorway and fixed glazed window. Level 2: • Gym – The southern gym compartment glazing serving the reception void is within 3m of the northern compartment. Level 3: • Tower 3 AFH – Eastern windows within 4m of the Community Exchange compartment. Details of compliance are to be illustrated on the wall type, window and door schedules or alternatively it is to be confirmed by the fire engineer whether this is being addressed as part of the Fire Engineered Performance Solution Report.	Additional Details Required
C4D5	**Acceptable method of protection** Window openings are to be protected by internal or external wall wetting sprinklers and must automatically close or be permanently fixed in the closed position, -/60/- fire windows that are automatic closing or permanently fixed closed or -/60/60 automatic closing fire shutters. Doorways are to be protected by internal or external wall wetting sprinklers used with doors that are self-closing or automatic closing, or -/60/30 self-closing or automatic closing fire doors. Other openings, excluding voids, are to be protected with internal or external wall wetting sprinklers or construction having an FRL not less than -/60/-.	The proposed method of protection of windows and doorways noted in clause C4D4 are to be illustrated onto the window and door schedules for review as part of the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
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	A door schedule nominating the required fire doors and their FRLs is to be provided for review at the	Compliance Readily Achievable

Clause	Description	Comment	Status
	that required for the firewall except that the insulation rating must be at least 30.	Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	
C4D7	**Sliding fire doors**	-	N/A
C4D8	**Protection of doorways in horizontal exits**	-	N/A
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.	A door schedule nominating the required fire doors and their FRLs is to be provided for review at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	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. The services drawings are to indicate compliance in accordance with this clause and to be provided as part of the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
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 are to note compliance in accordance with this condition, at the Construction Certificate stage.	Compliance Readily Achievable
C4D12	**Bounding construction: Class 2 and 3 buildings and Class 4 parts** Doorways opening to public corridors are to be protected with self-closing -/60/30 fire doors.	The residential amenity spaces on levels 2 and 3 are deemed part of the Class 2 building classification. A performance solution is required to permit the omission of fire separation and bounding construction into public corridors.	Performance Solution
		A wall type schedule and door schedule are to be provided for assessment at the Construction Certificate stage. Compliance is readily achievable	Compliance Readily Achievable

Clause	Description	Comment	Status
		subject to detailed design development.	
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 structure generally need to be fire-stopped and/or located in fire rated riser shafts. Openings in fire rated elements need to be fire resisting to maintain the function of the elements. A penetrations report from a Passive Fire Consultant nominating the types of openings requiring protection and the method of protection including products is to be provided at the Construction Certificate stage.	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 • If the shaft is a garbage shaft - a door or hopper of non-combustible construction.	A door schedule demonstrating compliance with this clause Is to be provided for assessment at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
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.	A schedule of penetrations prepared by a properly qualified Passive Fire Consultant nominating the types of openings requiring protection and the method of protection including test reports for each fire-stopping product is to be provided at the Construction Certificate stage.	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**	Any columns required to be protected in lightweight construction must be protected in accordance with the identical tested prototype. Product codes should be noted on architectural plans and corresponding test reports provided for assessment at the	Compliance Readily Achievable

Clause	Description	Comment	Status
		Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	
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.  	Loadbearing parts of the external walls and loadbearing columns not incorporated into the external wall are required to achieve an FRL. The achieved FRLs are to be shown on the structural drawings for assessment at the Construction Certificate Stage. Compliance is readily achievable subject to detailed design development. Refer to Appendix C2D2 for the required FRLs for exposed building elements.	Compliance Readily Achievable
S5C3	**Fire protection for a support of another part** Supporting elements must generally maintain required FRLs unless a concession is available under this clause.	The structural engineer will need to confirm that supporting elements generally maintain FRLs.	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.	The structural will need to confirm that lintels maintain the FRL required for the part of the building in which it is situated.	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.	Noted
S5C6	**General concessions** • (1) & (2) Concessions are applicable for some steel and timber columns in predominantly single storey buildings.	-	N/A

Clause	Description	Comment	Status
	• (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.		
S5C7	**Mezzanine floors: Concession**	-	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 or how the shafts extend beyond the roof covering per this clause are needed for review at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
		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 Construction Certificate stage to assess the feasibility of a Performance Solution to vary the DtS requirements of the BCA.	Performance Solution
S5C9	**Carparks in Class 2 and 3 buildings**	-	N/A
S5C10	**Residential care building: Concession**	-	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.	Large scale sections and slab edge details are to be provided to illustrate the fire separation of the slab edge both at the horizontal and vertical junctions, separating apartments, at Construction Certificate stage As part of design development, it is to be confirmed whether the inclusion of cavity barriers will form part of a fire engineering performance solution due to availability of tested systems in the market.	Compliance Readily Achievable

Clause	Description	Comment	Status
	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.	A performance solution is proposed to permit reduced FRL's to 120/120/120 in the following areas: • Lower Ground Level: Waste storage and retail. • Ground Level: Retail. • Mezzanine: Bicycle parking/storage. • Level 2: Bicycle parking/storage.	Performance Solution
		Large scale details, wall type schedules and structural drawings which indicate the FRLs achieved by building elements are needed for assessment at Construction Certificate stage Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
S5C12	**Type A fire-resisting construction –concession for floors** Floors do not require an FRL if they are: a) Laid on the ground. b) Within Class 2, 3 and 4 sole-occupancy units. c) Open-access and above a floor with the required FRL.	Concessions apply for the Class 2 sole-occupancy units.	Noted
S5C13	**Type A fire-resisting construction – floor loading of Class 5 and 9b buildings: Concession**	-	N/A
S5C14	**Type A fire-resisting construction – roof superimposed on concrete slab: Concession**	-	N/A
S5C15	**Type A fire-resisting construction – roof: Concession**	-	N/A
S5C16	**Type A fire-resisting construction – roof lights** Roof lights must: a) Not occupy more than 20% of the roof area; b) Be not less than 3m from a fire source feature, non-fire separated external walls projecting above, any roof light in an adjoining SOU or fire separated part of the building.	The proposed skylights on levels 3 and 4 are more than 3m from building elements and are capable of complying with this clause. Further assessment is required as part of design development.	Compliance Readily Achievable
S5C17	**Type A fire-resisting construction – internal columns and walls: Concession**	The proposed building has an effective height greater than 25m, therefore the concession cannot be applied.	N/A
S5C18	**Type A fire-resisting construction – open spectator stands and indoor sports stadiums: Concession**	-	N/A
S5C19	**Type A fire-resisting construction – carparks**	-	N/A
S5C20	**Type A fire-resisting construction – Class 2 and 3 buildings: Concession**	-	N/A
Section D: Access and Egress			
Part D2 - Provision for Escape			
D2D2	**Application of Part**	-	Applicable

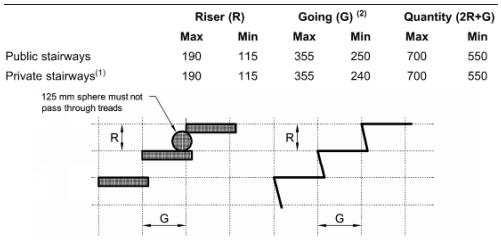
Clause	Description	Comment	Status
	This part does not apply to the internal parts of a sole-occupancy in a Class 2 or 3 building or Class 4 part of a building.		
D2D3	**Number of exits required** *(NSW variation for Entertainment Venues)* • At least two exits need to serve each storey of : • Buildings over 25m in effective height. • Class 2 or 3 buildings subject to C2D6. • Each basement level. Access to an exit must be provided without passing through another SOU.	A performance solution is required to permit access to an alternative exit from the level 2 bicycle storage to pass through an SOU (Level 2 Gym).	Performance Solution
D2D4	**When fire-isolated stairways and ramps are required** Every stair in a Class 2, 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.	All stairways connecting more than 3 storeys are noted to be fire-isolated.	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 nominated exits in the building are listed in appendix D2D5 of the report. The following areas have been identified with distances exceeding the required distance for a point of choice and require a performance solution: • Class 7b - Mezzanine level: 25m in lieu of 20m. • Class 9b - Level 1 Pool: 28m in lieu of 20m. • Class 2 - AFH T3 levels 3-10: 10m in lieu of 6m.	Performance Solution
		A performance solution is required to permit travel distance to a point of choice on the AFH T3 roof top amenity at 25m in lieu of 20m.	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 that they become less than 6m apart.	A performance solution is required to permit the T3 fire stairs to have a distance between alternative exits at 4.8m in lieu of 9m, within the follow areas: • Levels 1-2 – Gym: T3 fire stairs. 4.8m in lieu of 9m. • Levels 3 – 11 – AFH: T3 fire stairs. 4.8m in lieu of 9m. A performance solution is required to permit travel distance between alternative exits at 64m in lieu of 60m, within the level 3 waste/moving strategy compartment.	Performance Solution

Clause	Description	Comment	Status
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.	The sections provided have been reviewed and generally illustrate compliance with this clause. Reflected ceiling plans and door schedules indicating ceiling and doorway heights are to be provided for assessment at the Construction Certificate stage. Compliance readily achievable subject to detailed design development.	Compliance Readily Achievable
D2D8	**Width of exits and paths of travel to exits** *(NSW variation for Access and egress)*	The current plan show widths of exits and path of travels of exits to be capable of complying with this clause. Further assessment is required as part of the design development.	Compliance Readily Achievable
D2D9	**Width of doorways in exits or paths of travel to exits** *(NSW variation for Access and egress)* In a required exit or path of travel to an exit, the unobstructed width of a doorway must be not less than – • the unobstructed width of each exit provided to comply with D2D8(1), (2), (3) or (4), minus 250 mm; or • in any other case except where it opens to a sanitary compartment or bathroom — 750 mm wide	Based on a scaled assessment of the architectural drawings, all doors throughout the development achieve a minimum 750mm clear opening, however detailed assessment required at the Construction Certificate stage.	Compliance Readily Achievable
D2D10	**Exit width not to diminish in direction of travel**	Based on the drawings provided it appears that generally the unobstructed width of required exits have not been diminished in the direction of travel to a road or open space. A detailed assessment will be required as part of the Construction Certificate stage.	Compliance Readily Achievable
D2D11	**Determination and measurement of exits and paths of travel to exits**	Egress widths are measured clear of any obstructions and are to comply with the requirements of this clause.	Noted

Clause	Description	Comment	Status
D2D12	**Travel via fire-isolated exits**	A performance solution is required to permit the fire-isolated passageways to discharge into: • A covered area which is not open for at least 1/3 of its perimeter and; • Has a distance to an open space at 8m in lieu of 9m; and • A path within 6m of an external wall and openings which are not protected per C4D5.	Performance Solution
		A performance solution is required to permit the fire control room to open into the fire-isolated-passageway without a Deemed-to-Satisfy airlock.	Performance Solution
		A performance solution is required to permit the T1 and podium 2 fire-isolated-stairways to not provide independent egress by their own fire-isolated passageway.	Performance Solution
		A performance solution is required to permit the T2 and podium fire-isolated-stairways to not provide independent egress by their own fire-isolated passageway.	Performance Solution
D2D13	**External stairways or ramps in lieu of fire-isolated exits**	-	N/A
D2D14	**Travel by non-fire-isolated stairways or ramps**	The stairway serving the gymnasium has not been assessed as a non-fire-isolated stairway. This is due to the fire-isolated stairways being relied upon for egress.	N/A
D2D15	**Discharge from exits** *(NSW variation for Entertainment Venues)* An exit must not be blocked nor be capable of being blocked at its point of discharge.	A performance solution is required to permit the discharge points of alternative exits not being located as far apart as practical.	Performance Solution
D2D16	**Horizontal exits**	-	N/A
D2D17	**Non-required stairways, ramps or escalators**	It has been assumed that the stairway serving the gymnasium does not connect more than 3 storeys. Please provide internal section including details of what is proposed at the stairway landing at mezzanine level. It is recommended that the stairway landing is provided with a balustrade in lieu of an enclosing wall.	Additional Details Required

<table>
<tr><th>Clause</th><th>Description</th><th>Comment</th><th>Status</th></tr>
<tr><td>D2D18</td><td>Number of persons accommodated<table><tr><th>Level</th><th>Use</th></tr><tr><td>Lower Ground</td><td>Retail, loading dock.</td></tr><tr><td>Ground Floor</td><td>Retail and residential lobby</td></tr><tr><td>Mezzanine Level</td><td>Storage</td></tr><tr><td>Level 1</td><td>Gymnasium/pool</td></tr><tr><td>Level 2</td><td>Gymnasium</td></tr><tr><td>Level 3</td><td>Residential amenity and AFH apartments.</td></tr><tr><td>Level 4</td><td>Residential apartments.</td></tr><tr><td>Levels 5-10</td><td>Residential apartments.</td></tr><tr><td>Levels 11 – 25</td><td>Residential apartments.</td></tr><tr><td>Level 26 (Roof)</td><td>Residential roof top amenity.</td></tr></table></td><td>The following numbers of persons accommodated apply:
Lower Ground – 200.
Ground Level – 200.
Level 1 – 88.
Level 2 – 410.</td><td>Noted</td></tr>
<tr><td>D2D19</td><td>Measurement of distances</td><td>-</td><td>Noted</td></tr>
<tr><td>D2D20</td><td>Method of measurement</td><td>-</td><td>Noted</td></tr>
<tr><td>D2D21</td><td>Plant rooms, lift machine rooms and electricity network substations: Concession</td><td>-</td><td>Noted</td></tr>
<tr><td>D2D22</td><td>Access to lift pits
Access requirements apply to lift pits over 3m in depth.</td><td>Lift consultant to confirm.</td><td>Compliance Readily Achievable</td></tr>
<tr><td>D2D23</td><td>Egress from primary schools</td><td>-</td><td>N/A</td></tr>
<tr><td colspan="4">Part D3 - Construction of Exits</td></tr>
<tr><td>D3D2</td><td>Application of Part
(NSW variation for Entertainment Venues)</td><td>-</td><td>Applicable</td></tr>
<tr><td>D3D3</td><td>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.</td><td>The Structural Engineer is required to provide design certification at Construction Certificate stage with regards to the structural design.</td><td>Compliance Readily Achievable</td></tr>
<tr><td>D3D4</td><td>Non-fire-isolated stairways and ramps</td><td>The stairway serving the gymnasium has not been assessed as a non-fire-isolated stairway. This is due to the fire-isolated stairways being relied upon for egress.</td><td>N/A</td></tr>
<tr><td>D3D5</td><td>Separation of rising and descending stair flights</td><td>A performance solution is needed to permit the direct connection between rising and descending stair flights from the following areas:
T1 and podium 2 fire stairs.
T2 and podium fire stairs.</td><td>Performance Solution</td></tr>
</table>

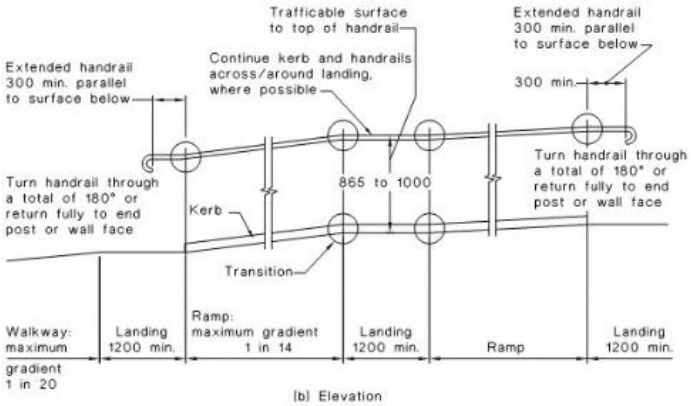
Clause	Description	Comment	Status
D3D6	**Open access ramps and balconies**	-	N/A
D3D7	**Smoke lobbies**	-	N/A
D3D8	**Installations in exits and paths of travel** Electrical meters and motors, distribution boards and telecommunication boards must not be accessed from fire isolated exits and, if located 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.	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. Compliance should be illustrated on the drawings at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
D3D9	**Enclosure of space beneath stairs and ramps** If the space below a fire-isolated stairway is within the fire isolated shaft it must not be enclosed to form a cupboard or similar enclosed space. The space below non fire-isolated stairs must not be enclosed to form a cupboard or similar enclosed space unless the enclosing walls have an FRL of not less than 60/60/60 and any doorway to the enclosed space is fitted with a self-closing -/60/30 fire door.	Based on the section provided there does not appear to be any enclosure of space beneath stairways. Further assessment will be required as part of design development.	Compliance Readily Achievable
D3D10	**Width of required stairways and ramps**	-	Noted
D3D11	**Pedestrian ramps** Ramps serving as required exit must have a 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.	-	N/A
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	-	Noted
D3D13	**Roof as open space** The roof is required to have an FRL of not less than 120/120/120 and not incorporate any roof lights or other openings within 3m of the path of travel.	-	N/A
D3D14	**Going and risers** *(NSW variation for Entertainment Venues)* 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.	Large scale stair details are needed for review and are to be provided at Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable

Clause	Description	Comment	Status
	• 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  		
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: **Application** / **Dry Surface Conditions** / **Wet Surface Condition** 1:14 or steeper ramps — P4 or R11 — P5 or R12 Ramps of 1:14 to 1:20 — P3 or R10 — P4 or R11 Tread or Landing Surface — P3 or R10 — P4 or R10 Nosing Strip or Landing Strip — P3 — P4	A finishes schedule specifying ramp and stairway finishes and corresponding slip resistance certification/test reports must be provided for assessment at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
D3D16	**Thresholds** *(NSW variation for Entertainment Venues)* 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 Class 9c building, a ramp is provide with a maximum gradient of 1:8 for a maximum height of 25mm over the threshold • 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,	Large scale building sections illustrating door thresholds must be provided for assessment at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable

Clause	Description	Comment	Status
	• Or in any other case a single 190mm step is permitted at doors leading to the exterior.		
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** *(NSW variation for Entertainment Venues)* 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.	Large scale balustrade details are needed for assessment at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	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 fixes 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.	Large scale balustrade details are needed for assessment at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	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 150mm and 760mm above the floor.	Large scale balustrade details are needed for assessment at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
D3D21	**Wire barriers**	-	N/A
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	Refer to Access Report 2024/1243 prepared by Steve Watson and Partners.	Compliance Readily Achievable

Clause	Description	Comment	Status
	degree curled ends		

Ramps

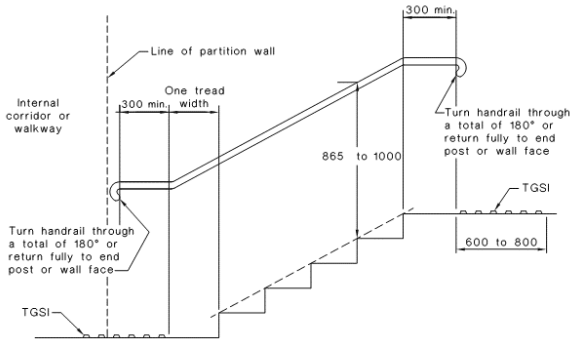


(b) Elevation

DIMENSIONS IN MILLIMETRES

FIGURE 14 RAMP HANDRAILS

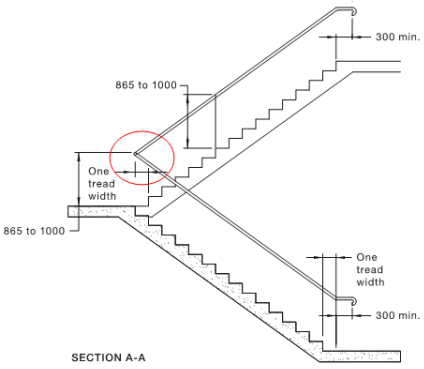
Stairways



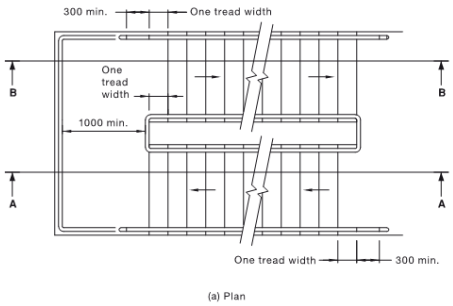
SECTIONAL VIEW

DIMENSIONS IN MILLIMETRES

FIGURE 26(B) STAIRWAY LOCATION AND HANDRAIL EXTENSIONS AT END OF STAIRWAY OTHER THAN AT LINE OF BOUNDARY

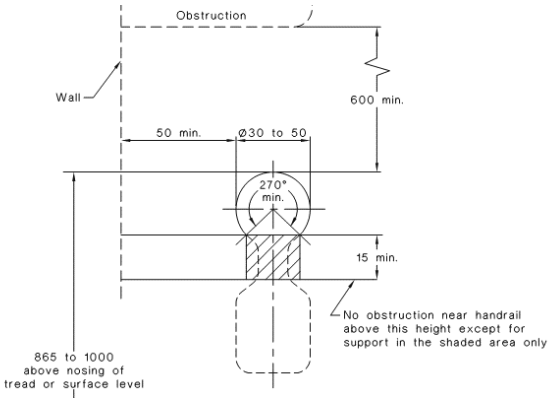


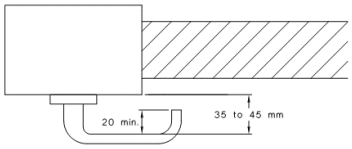
SECTION A-A



(a) Plan

DIMENSIONS IN MILLIMETRES

Clause	Description	Comment	Status
	Handrail Profile 		
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.	Certification and details of fixed platforms, walkways, stairways and ladders serving roof top plant to AS1657 at the Construction Certificate stage.	Compliance Readily Achievable
D3D24	**Doorways and doors** *(NSW variation for Entertainment Venues)* 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.	A door schedule is needed for review at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	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.	A door schedule is needed for review at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
		The alternative exit serving the shared lobby must swing in the direction of travel. Updated drawings illustrating compliance are to be provided as part of Design Development.	Additional Details Required
D3D26	**Operation of latch** *(NSW variation for Entertainment Venues)* 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 door schedule is to be provided for assessment at the Construction Certificate stage.	Compliance Readily Achievable

Clause	Description	Comment	Status
	 (a) Isometric view  (b) Plan view • Where the latch operation device is not located on the door leaf itself- • manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located not less than 500 mm from an internal corner; and • for a hinged door, between 1 m and 2 m from the door leaf in any position; • and for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position. • 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.		
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	As the building has an effective height which exceeds 25m re-entry is required to be provided from all fire isolated stairs. The door schedule is to be updated to demonstrate compliance with the requirements of this Clause.	Compliance Readily Achievable

Clause	Description	Comment	Status
	locked within the stair. Note: 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.		
D3D28	**Signs on doors** Signage in capital letters not less than 20mm high to be provided on doors as follows i. A door held open by an automatic hold-open device: **FIRE SAFETY DOOR - DO NOT OBSTRUCT** ii. for a self-closing door **FIRE SAFETY DOOR** **DO NOT OBSTRUCT** **DO NOT KEEP OPEN** iii. for a door discharging from a fire-isolated exit **FIRE SAFETY DOOR - DO NOT OBSTRUCT**	Under Section 108 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 a notice is to be displayed in a conspicuous location adjacent to a doorway providing access to but not within a fire isolated stairway, passageway or ramp. The words "**OFFENCES RELATING TO FIRE EXITS**" are to be provided in letters at least 8mm high and the remaining words are to be at least 2.5mm high. The notice is to state the following: **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.	Compliance Readily Achievable
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	A window schedule noting restricted openings sizes and compliance with this clause is to be provided at the Construction Certificate stage.	Compliance Readily Achievable

Clause	Description	Comment	Status
	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.		
D3D30	**Timber stairways: Concession**	-	N/A
NSW D3D31	**Doors in the path of travel in an Entertainment Venue**	-	N/A
Part D4 - Access for People with Disabilities			
D4D2	**General building access requirements** Access is generally required for persons with a disability throughout all areas unless specifically exempted.	Refer to Access Report 2024/1243 prepared by Steve Watson and Partners for the compliance assessment against BCA Part D4.	Compliance Readily Achievable
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. *Note: Varied booster protection requirements for sprinklered and non-sprinklered buildings.* *Note: Ring main requirements for large-isolated buildings and buildings exceeding 25m in effective height.*	Full compliance with AS2419.1 will be required unless varied via fire brigade approval. The hydraulic engineer must ensure that compliant coverage is provided to all areas of the building from the internal hydrants. At Construction Certificate stage, the hydraulic engineer must provide design certification to accompany the drawings certifying the design complies with Clause E1D2 of the BCA and AS2419.1-2021 (noting any non-compliances, which are to be addressed as a Performance Solution).	Compliance Readily Achievable
		A performance solution is required to permit the fire brigade booster to be located 35m from the principal entry in lieu of 20m as required by clause 7.3 of AS2419.1. It is also recommended for the fire engineer to consider the multiple pedestrian entries on a performance basis.	Performance Solution
		The pump room does not have a door which leads directly to a fire isolated passageway or stair leading to a road or open space. Also, the T1 stairs relies on the connection to the podium 2 fire stair to lead to a road/open space. The fire engineer is to confirm whether this is feasible to address through a performance solution.	Additional Details Required
E1D3	**Fire hose reels** Fire hose reel coverage to AS2441-2005 is required throughout with hose reels located adjacent to	The hydraulic engineer must ensure that compliant coverage is provided to all areas of the building. At Construction Stage, the engineer must	Compliance Readily Achievable

Clause	Description	Comment	Status
	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	provide drawings and design certification certifying the design complies with Clause E1D3 of the BCA and AS2441 - 2005. This clause does not apply to the following areas: • Residential amenity on levels 2 and 3. • Residential floors and roof top terraces.	
E1D4	**Sprinklers** *(NSW variation for Residential Aged Care)* 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. • An enclosed carpark with more than 40 cars occurs. • The building is used for residential care, residential aged care or shared residential accommodation. • Occupancies of "excessive hazard" that occur in fire compartments over 2,000m^2 or 12,000m^3. (Refer definition below) 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.	A sprinkler system is required in accordance with AS2118.1-2017 throughout. At the Construction Certificate stage, the accredited fire services designer must provide drawings and should confirm any shortfalls in compliance, including any items that will require a performance solution.	Compliance Readily Achievable
		The sprinkler pump room/enclosure does not have direct egress to a road or open space, as required. The fire engineer is to confirm whether this is feasible to address through a Performance Solution. Otherwise, the architectural drawings are to be updated to illustrate a sprinkler pump room/enclosure which has direct egress to road or open space.	Additional Details Required
E1D5	**Where sprinklers are required: all classifications**	Sprinklers are required throughout the whole as the building has an effective height of more than 25m.	Noted
E1D6	**Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings**	Sprinklers are required throughout the building.	Noted
E1D7	**Where sprinklers are required: Class 3 building used as a residential care building**	-	N/A
E1D8	**Where sprinklers are required: Class 6 building**	-	Noted
E1D9	**Where sprinklers are required: Class 7a building, other than an open-deck carpark**		N/A

Clause	Description	Comment	Status
E1D10	**Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings**	-	N/A
E1D11	**Where sprinklers are required: Class 9b buildings**	-	N/A
E1D12	**Where sprinklers are required: additional requirements**	-	N/A
E1D13	**Where sprinklers are required: occupancies of excessive hazard** "Excessive hazard" means: a) Hazardous process risks including the following: (i) Aircraft hangars (ii) Electrical/electronic manufacturing and assembly (predominantly plastic components. (iii) Fire-lighter manufacturing. (iv) Fireworks manufacturing. (v) Flammable liquid spraying. (vi) Foam plastic goods manufacturing and/or processing. (vii) Foam rubber goods manufacturing and/or processing. (viii) Hydrocarbon based sheet product manufacturing. (ix) Nitrocellulose and nitrocellulose goods manufacturing. (x) Paint and varnish works, solvent based. (xi) Plastic goods manufacturing and/or processing works. (xii) Resin and turpentine manufacturing. (xiii) Vehicle repair shops. b) Combustible goods with an aggregate volume exceeding 2,000m3 and stored to a height greater than 4m such as the following: (i) Aerosol packs with flammable contents. (ii) Cartons and associated packing material excluding cartons with densely packed non-combustible content.	-	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 • emergency services switchboards • kitchens • flammable liquid stores • at nurses' stations • special risk areas • where fire hose reels are not installed • Class 2, 3 or 4 residential areas are to be protected by 2.5kg ABE type fire	The fire services designer is to ensure that the locations and types of portable comply with the requirements of this clause and AS2444. Note – For class 2 buildings, the travel distance from the entrance doorway of any sole-occupancy unit to the nearest fire extinguisher must be no more than 10m.	Compliance Readily Achievable

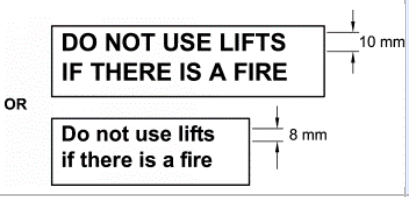
Clause	Description	Comment	Status
	extinguishers located in common areas on the storey served and located not more than 10m from each sole occupancy unit entry door.		

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 18,000m² 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 system to ventilate with 30 air changes required.
		The fire control centre spatially complies, as it has a floor area greater than 10m² and has internal sides greater than 2.5m.
		
		The features identified under Specification 19 are to be illustrated on the drawings as part of design development for further assessment.
			Compliance Readily Achievable

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	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	Noted

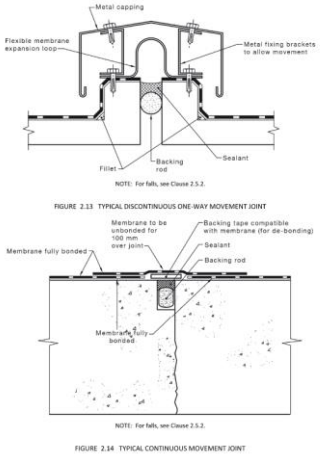
Clause	Description	Comment	Status
	uppermost storeys. • Any required booster connections must be installed.	temporary boosters and no fire pumps, may need to be agreed with the fire brigade. This needs to be put in place early in the construction programme and may require liaison with the builder and his fire services contractor.	
E1D17	**Provisions for special hazards**	The solar panels installed to the roof top of all three towers are a special hazard and requires a separate 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 200m^2 • storerooms, etc. less than 30m^2 • sanitary compartments • plant rooms or the like	Applicable
E2D3	**General requirements** Air handling systems not forming part of a smoke hazard management system per E2D4-E2D4 which recycles air from one fire compartment to another or operates in a manner which can contribute to the spread of smoke from one fire compartment to another must be design and installed: • to operate as a smoke control system in accordance with AS1668.1 or • incorporates smoke dampers serving penetrating ducts and arranged so that air-handling systems shutdown and smoke dampers activate automatically by smoke detectors complying with clause 7.5 of AS1670.1. Note – Each sole occupancy unit in a Class 2 building is treated as a separate fire compartment.	The air handling systems must be designed with the provision of a smoke control system or smoke dampers in accordance with this clause. The mechanical engineer is to detail compliance within their drawings at the Construction Certificate stage.	Compliance Readily Achievable
E2D4	**Fire-isolated exits**	A required fire-isolated stairway and associated fire-isolated passageways are required to be provided with an automatic air pressurisation system in accordance with AS1668.1. Fire services and mechanical drawings are to illustrate compliance at the Construction Certificate stage.	Compliance Readily Achievable
		The project fire engineer will need to confirm whether the proposed design maintains consistency with the base building fire engineering in report, at the Construction Certificate stage. In particular, the existing performance	Compliance Readily Achievable

Clause	Description	Comment	Status
		solution addressing stair pressurisation within the ground floor fire isolated stair.	
E2D5	**Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building**	An automatic smoke detection and alarm system complying with Specification 20 must be provided. Fire services drawings are to illustrate compliance at the Construction Certificate stage.	Compliance Readily Achievable
E2D6	**Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings**	A performance solution is required to permit the omission of a zone pressurisation system between vertically separated fire compartments in accordance with AS1668.1.	Performance Solution
E2D7	**Buildings more than 25 m in effective height: Class 9a buildings**	-	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
E2D9	**Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings**	-	N/A
E2D10	**Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4** *(NSW variation for Entertainment Venues)*	-	N/A
E2D11	**Buildings not more than 25 m in effective height: Class 9a and 9c buildings**	-	N/A
E2D12	**Class 7a buildings**	-	N/A
E2D13	**Basements (other than Class 7a buildings)**	-	N/A
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
E2D15	**Class 6 buildings - in fire compartments more than 2000 m²: Class 6 building (containing an enclosed common walkway or mall)**	-	N/A
NSW E2D16	**Class 9b – assembly buildings: all**	The proposed pool and gymnasium on levels 1 and 2 are required to be provided with an automatic shut-down of any air handling system, which does not form part of the smoke hazard management system. This is to be upon activation of smoke detection and fire detection, including a sprinkler system. The mechanical and fire services engineers are to confirm and illustrate compliance at the Construction Certificate stage.	Compliance Readily Achievable
NSW E2D17	**Class 9b – assembly buildings: night clubs, discotheques and the like**	-	N/A

Clause	Description	Comment	Status
NSW E2D18	**Class 9b – assembly buildings: exhibition halls, museums and art galleries**	-	N/A
NSW E2D19	**Class 9b – assembly buildings: other assembly buildings (not listed in NSW E2D16 to E2D18)**	It is noted that the gymnasium fire compartment on level 2 will be separated by a fire wall to reduce compartments less than 2000m².	Noted
NSW E2D20	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
E2D21	**Provisions of special hazards**	The roof top solar panels are 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 at the Construction Certificate stage	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.	A stretcher facility must be provided to at least one emergency lift required by E3D5. A stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600 mm wide x 2000 mm long x 1400 mm high above the floor level. The architectural drawings show lifts achieving a length of 2000mm. The vertical transport engineer will need to provide the lift specification at the Construction Certificate stage.	Compliance Readily Achievable
E3D4	**Warning against use of lift in fire** Warning signage is required at lift doors advising that lifts should not be used in the event of a fire.	Signage to be installed stating. 	Compliance Readily Achievable
E3D5	**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. The following requirements apply to an emergency lift: • Must serve all storeys served by a passenger lift.	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 vertical transport engineer will need to provide the lift specification at the Construction Certificate stage.	Compliance Readily Achievable

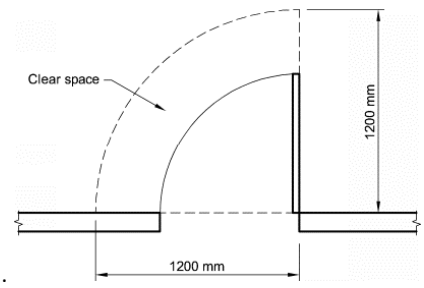
Clause	Description	Comment	Status
	• Must be contained in a fire rated shaft. • If the building effective height exceeds 75m, must have a 600kg rating if not provided with a stretcher facility or a 900kg rating if stretcher facility is provided.		
E3D6	**Landings**	-	Compliance Readily Achievable
E3D7	**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 reply on a constant pressure device for its operation if the lift car is fully enclosed.	Compliance with this clause is to be specified on the lift specification prepared by the vertical transport engineer at the 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.	Refer to the Access Report 2024/1243 prepared by Steve Watson and Partners.	Compliance Readily Achievable
E3D9	**Fire service control**	Where lifts serve a storey above 12m in effective height: • A fire service control switch is required for each lift or lift group. • A lift car fire service drive control is required for each lift. Certification of lift design to be provided as part of the Construction Certificate stage.	Compliance Readily Achievable
E3D10	**Residential care buildings**	-	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.	Compliance with this clause is to be specified on the lift specification and certified by the vertical transport engineer at the Construction Certificate stage.	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.	Compliance with this clause is to be specified on the lift specification and certified by the vertical transport engineer at the Construction Certificate stage.	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, • Every passageway, hallway, corridor or the like, that is part of the path of travel to an	Emergency lighting layouts are to be shown on the electrical plans and certified by the electrical engineer at the Construction Certificate stage.	Compliance Readily Achievable

Clause	Description	Comment	Status
	exit. • In rooms of Class 5, 6, 7, 8 or 9 buildings 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 a Class 5, 6, 8 or 9 buildings. • To every room or space that has public access in a Class 6 or 9b building if: o the floor area is more than 300m²; o or if any point on the floor is more than 20m from the nearest doorway opening directly to the road or open space; or o if the egress involves a vertical rise within the building of more than 1.5m.		
E4D3	**Measurement of distances**	-	Noted
E4D4	**Design and operation of emergency lighting** Emergency lighting must comply with to AS2293.1	-	Noted
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.	Exit sign locations are to be shown on the electrical plans and certified by the electrical engineer at the Construction Certificate stage	Compliance Readily Achievable
E4D6	**Direction signs** *(NSW variation for Entertainment Venues)* 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.	Exit sign locations are to be shown on the electrical plans and certified by the electrical engineer at the Construction Certificate stage.	Compliance Readily Achievable
E4D7	**Class 2 and 3 buildings and Class 4 parts: Exemptions**	-	Noted
E4D8	**Design and operation of exit signs** 1. Exit signs are to operate in accordance with AS 2293.1. 2. Photo luminescent exit sign are to comply with Specification 25.	-	Noted

Clause	Description	Comment	Status
E4D9	**Emergency warning and intercom systems** An emergency warning and intercom system complying with AS 1670.4 must be installed throughout the building.	The fire services plans are to illustrate compliance and be certified by a qualified fire services engineer at the Construction Certificate stage	Compliance Readily Achievable
Section F: Health and Amenity			
Part F1 - External waterproofing, rainwater management and rising damp			
F1D1	**Deemed-to-Satisfy Provisions** (1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F1P1 to F1P4 are satisfied by complying with F1D2 to F1D8. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	A test report on the proposed wall 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.	Noted
F1D3	**Stormwater drainage**	Stormwater drainage must comply with AS/NZS 3500.3.	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.  FIGURE 2.13 TYPICAL DISCONTINUOUS ONE-WAY MOVEMENT JOINT FIGURE 2.14 TYPICAL CONTINUOUS MOVEMENT JOINT	The structural engineer and architect are to confirm compliance with clause.	Compliance Readily Achievable
F1D5	**External waterproofing membranes**	A waterproofing detail illustrating	Compliance

Clause	Description	Comment	Status
	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.	compliance with this clause are to be provided for assessment at Construction Certificate stage.	Readily Achievable
F1D6	**Damp-proofing** Moisture from the ground must be prevented from reaching the lowest floor timber and the walls 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.	The structural engineer is to include a damp-proofing detail within their design at the Construction Certificate stage.	Compliance Readily Achievable
F1D7	**Damp-proofing of floors on the ground** A vapour barrier in accordance with AS2870 is to be provided beneath the basement floor slab.	-	Compliance Readily Achievable
F1D8	**Subfloor ventilation**	-	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.	-	Noted
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.	Waterproofing details are to be provided for review at the Construction Certificate stage.	Compliance Readily Achievable
F2D3	**Rooms containing urinals** Additional requirements apply including falls to floor wastes and impervious materials surrounding urinals.	Waterproofing details are to be provided for review at the Construction Certificate stage.	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.	Hydraulic plans are to be provided illustrating the locations of floor wastes in accordance with this clause, at the Construction Certificate stage Compliance readily achievable subject to detailed design development.	Compliance Readily Achievable

Clause	Description	Comment	Status
Part F3 - Roof and wall cladding			
F3D1	**Deemed-to-Satisfy Provisions** 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.	The qualified façade engineer is to provide a performance solution report supported by relevant test reporting for the proposed external wall system, unless a DtS solution can be achieved. The façade engineer will need to verify the compliance strategy at the Construction Certificate stage.	Compliance Readily Achievable
F3D2	Roof coverings The roof must be covered with an external waterproofing membrane complying with F1D5.	Additional details are to be provided as part of the Construction Certificate 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.	The façade engineers' drawings and design certification are to be provided for assessment at the Construction Certificate 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 *Clause A2G2 - Performance Solution.*	Performance Solution
Part F4 - Sanitary and other facilities			
F4D2	**Facilities in residential buildings**	The plans currently illustrate the provision of facilities as required under this clause. Further details are required to be illustrated on the plans to determine whether the laundry facility will be served by heat operated drying cabinet or appliance at the Construction Certificate stage.	Compliance Readily Achievable
F4D3	**Calculation of number of occupants and fixtures**	Sanitary facilities will be determined on an equal bases for male and female occupants.	Noted
F4D4	**Facilities in Class 3 to 9 buildings** Toilet facilities are required in appropriate numbers based on the number of persons accommodated.	Refer to appendix F4D4 of this report. The following populations have been assumed for the café/restaurant: • Retail 01 = 50 patrons with 10 staff.	Additional Details Required

Clause	Description	Comment	Status
		• Retail 02 = 60 patrons with 10 staff. • Retail 03-05 = 200 patrons with 20 staff. • Rooftop bar = 200 patrons including 20 staff. The following shortfalls have been noted: • Retail 01 = x1 urinal. Note 1 - This is on the basis that Retail 03-05 share sanitary facilities, as requested. The architectural plans are to be updated to illustrate the additional x1 urinal.	
		A performance solution is required to justify the number of sanitary facilities and showers serving the gym on levels 1 -2.	Performance Solution
F4D5	**Accessible sanitary facilities** Facilities should be constructed to AS1428.1 - 2009 although an existing WC facility that fully complies with AS1428.1 - 2001 may substitute as a concession. Separate male and female ambulant facilities are required at each bank of toilets that contains one or more toilets in addition to an accessible unisex facility.	Refer to Access Report 2024/1243 prepared by Steve Watson and Partners.	Compliance Readily Achievable
F4D6	**Accessible unisex sanitary compartments** Accessible unisex toilets for people with a disability are required on each storey and at 50% of toilet banks on any storey.	Refer to Access Report 2024/1243 prepared by Steve Watson and Partners.	Compliance Readily Achievable
F4D7	**Accessible unisex showers**	Refer to Access Report 2024/1243 prepared by Steve Watson and Partners.	Compliance Readily Achievable
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 door schedule will need to note compliance with this clause and to be provided for assessment at the Construction Certificate stage Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
F4D9	**Interpretation: Urinals and washbasins**	-	Noted

Clause	Description	Comment	Status
	Each 600mm length of a continuous urinal trough is counted as 1 urinal.		
F4D10	*(NSW variation - This clause has deliberately been left blank.)*	-	Noted
F4D11	**Waste management**	-	N/A
F4D12	**Accessible adult change facilities**	-	N/A
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 theatre, 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; in a Class 9a health-care building— (i) a patient care area — 2.4 m; and (ii) an operating theatre or delivery room — 3 m; and (iii) a treatment room, clinic, waiting room, passageway, corridor, or the like — 2.4 m	Heights of rooms are capable of complying based on the provided sections. Detailed sections and reflected ceiling plans are needed for review at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	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.	A schedule of the area of window openings and the area of each room served that demonstrates compliance with this clause must be provided for assessment at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable
F6D3	**Methods and extent of natural lighting**	A schedule of the area of window openings and the area of each room served that demonstrates compliance with this clause must be provided for assessment at the Construction Certificate stage. Compliance is readily achievable subject to detailed design development.	Compliance Readily Achievable

Clause	Description	Comment	Status
F6D4	**Natural light borrowed from adjoining room**	A performance solution is required to assess the shortfall of natural lighting to the study areas throughout the proposed development.	Performance Solution
F6D5	**Artificial lighting**	The artificial lighting system must comply with AS/NZS 1680.0.	Compliance Readily Achievable
F6D6	**Ventilation of rooms** *(NSW variation for Public Health Regulation)* 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 to be provided at the Construction Certificate stage. Compliance readily achievable subject to design development.	Compliance Readily Achievable
F6D7	**Natural ventilation**	-	Noted
F6D8	**Ventilation borrowed from adjoining room**	-	Noted
F6D9	**Restriction on location of sanitary compartments**	Based on the plans provided, sanitary compartments do not open into kitchens, public dining rooms, public assembly rooms and workplaces.	Compliance Readily Achievable
F6D10	**Airlocks**	-	Noted
F6D11	**Carparks**	-	N/A
F6D12	**Kitchen local exhaust ventilation**	-	N/A
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.	Refer to the acoustic consultant's report.	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. Walls that are required to have an impact sound insulation rating must be of discontinuous construction.	Refer to the acoustic consultant's report.	Compliance Readily Achievable
F7D5	**Sound insulation rating of floors** Floors separating sole occupancy units or	Refer to the acoustic consultant's report.	Compliance Readily

Clause	Description	Comment	Status
	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.		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.	Refer to the acoustic consultant's report.	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: a) 40 if the adjacent room is a habitable room (other than a kitchen); or b) 25 if the adjacent room is a kitchen or non-habitable room. Note if a stormwater pipe passes through a sole - occupancy unit it must be separated in accordance with (a) and (b).	Refer to the acoustic consultant's report.	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.	Refer to the acoustic consultant's report.	Compliance Readily Achievable
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.	-	Applicable
F8D3	**External wall construction** Where a pliable building membrane is installed in an external wall it must:	The façade engineer will need to detail the external wall system in accordance with this clause.	Compliance Readily Achievable

Clause	Description	Comment	Status
	• 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.		
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.	The mechanical engineer will need to detail the exhaust systems in accordance with this clause.	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°. 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.	The mechanical engineer will need to detail the exhaust systems in accordance with this clause.	Compliance Readily Achievable
Section G: Ancillary Provisions			
Part G1- Minor Structures and components			
G1P1	**Swimming pool drainage** There are no DTS provisions for Performance Requirement G1P1.	A swimming pool must have adequate means of draining the pool in a manner which will not— • cause illness to people; or • affect other property. A performance solution is required to	Performance Solution

Clause	Description	Comment	Status
		address the requirements of GP1.1, which has no Deemed-to-Satisfy provisions.	
G1D2	**Swimming pools** *(NSW variation for swimming pools)*	A performance solution is required to permit the level 1 pool to be provided without a suitable barrier in accordance with AS 1926.1 and AS 1926.2.	Performance Solution
G1D3	**Refrigerated chambers, strong rooms and vaults**	-	N/A
G1D4	**Outdoor play spaces**	-	N/A
NSW G1D5	**Provision for cleaning windows** A safe manner of cleaning windows is to be provided as windows are located 3 or more storeys above ground level.	The windows must either be able to be cleaned wholly from within the building, or a method complying with the Construction Safety Act 1912 and Regulations is required. The system to provide window cleaning is to be confirmed at the Construction Certificate stage.	Compliance Readily Achievable
Part G2 - Boilers, pressure vessels, heating appliances, fire places, chimneys and flues			
G2D2	**Installation of appliances**	-	N/A
Part G3 - Atrium Construction			
G3D1	**Application of Part**	Currently the void connecting the shared lobby to level 2 has not been determined as an atrium. Detailed section of this area is required to be provided for further assessment as it has significant impacts of the project in terms of fire safety Please provide internal section including details of what is proposed at the stairway landing at mezzanine level. It is recommended that the stairway landing is provided with a balustrade in lieu of an enclosing wall.	Additional Details Required
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 $10m^2$.	-	Applicable
G6D2	**Fire hazard properties** A lining, material or assembly in an occupiable outdoor area must comply with C2D11 as for an	Proposed materials used in outdoor occupiable areas are subject to C2D11 requirements as this clause.	Compliance Readily Achievable

Clause	Description	Comment	Status
	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 ($SMOGRA_{RC}$)	Compliance is readily achievable subject to a schedule of internal finishes and corresponding fire hazard test data for all combustible internal linings are provided for review at Construction Certificate stage.	
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 structural engineer is to verify the FRLs achieved to building elements at the Construction Certificate stage.	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.	Noted
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.	Noted
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.	Noted
G6D7	**Lift installations** For the purposes of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area.	The lift design and installation must comply with the requirements of Part E3. The vertical transport engineer must provide a specification detailing compliance with this clause and Part E3, at Construction Certificate stage.	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.	Noted
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.	-	Noted
G6D10	**Fire orders**	-	N/A
Part G7 - Livable housing design			
NSW G7D2	**Livable housing design** *This Part has deliberately been left blank. Part G7 does not apply in NSW as livable housing design requirements do not apply to sole-occupancy units*	-	N/A

Clause	Description	Comment	Status
	in a Class 2 building in NSW.		
Section I: Special use buildings			
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.			
Section J	**Energy efficiency measures** Energy efficiency measures are prescribed for the following building elements to limit energy consumption:- • Building fabric • External glazing • Building sealing • Air movement. • Air-conditioning and ventilation systems. • Artificial lighting and power • Hot water supply • Access for maintenance	The Section J Consultant is to provide a design compliance report confirming the method of compliance based on the design being submitted for the Construction Certificate.	Compliance Readily Achievable

16. Appendix A - Referenced Documentation

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

Drawing No.	Title	Issue	Date	Drawn By
-	Site A – Ground Floor	A	07/02/2025	Woods Bagot
-	Site A – Level 1	A	07/02/2025	Woods Bagot
-	Site A – Level 2	A	07/02/2025	Woods Bagot
-	Site A – Level 3	A	07/02/2025	Woods Bagot
-	Site A – Level 4	A	07/02/2025	Woods Bagot
-	Site A – Level 5-10	A	07/02/2025	Woods Bagot
-	Site A – Level 11	A	07/02/2025	Woods Bagot
-	Site A – Level 12	A	07/02/2025	Woods Bagot
-	Site A – Level 13	A	07/02/2025	Woods Bagot
-	Site A – Level 14-25	A	07/02/2025	Woods Bagot
-	Site A – Level 26	A	07/02/2025	Woods Bagot
-	Site A – Roof	A	07/02/2025	Woods Bagot
-	Indicative Elevation – Pacific Highway	A	07/02/2025	Woods Bagot
-	Indicative Sections	A	07/02/2025	Woods Bagot

17. 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
Mechanical Air Handling System *(Automatic Smoke Exhaust System)*	BCA 2022 Specification 21
Automatic Fire Suppression Systems *(Sprinklers)*	BCA 2022 Specification 17 and AS 2118.1 - 2017
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, 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 Centre / 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 Engineering Performance Solution Report	Fire Engineering Performance Solution Report prepared by **** Rev *** Dated ****.
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.
Fire Windows	BCA 2022 Specification 12 and AS 1530.4 - 2014
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 *(Automatic Air Pressurisation System)*	BCA 2022 Clause E2D4, E2D8, E2D9 and AS 1668.1 - 2015
Portable Fire Extinguishers	BCA 2022 Clause E1D14 and AS 2444 - 2001

Measure	Standard of Performance
Smoke Dampers	BCA 2022 S11C3 and AS 1682.1 - 2015 and AS 1682.2 - 2015
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.

18. Appendix C2D2 - Fire Rating Requirements

18.1. Type A Construction

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

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

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

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

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

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

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

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

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

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

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

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

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

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

19. 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 250m^2/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

20. Appendix D3D29 - Protection of Openable Windows

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

21. Appendix F4D4 - Requirements for Sanitary Facilities

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

Class	Use	Occupant Numbers			WC Required / Provided		Urinal Required / Provided		Basin Required / Provided	
		Total								
6	Retail 01 – Café/ restaurant	10 (Staff)	Male	5	1	1	0	0	1	1
			Female	5	1	1	N/A		1	1
			Unisex Disabled	1	1	1	N/A		1	1
6	Retail 01 – Café/ restaurant	50 (Patrons)	Male	25	1	1	1	0	1	1
			Female	25	1	1	N/A		1	1
			Unisex Disabled	1	1	1	N/A		1	1
6	Retail 02 – Café/ bar/ restaurant	10 (Staff)	Male	5	1	1	0		0	1
			Female	5	1	1	N/A		1	1
			Unisex Disabled	1	1	1	N/A		1	1
6	Retail 02 – Café/ bar/ restaurant	60 (Patrons)	Male	30	1	1	1		(1)	1
			Female	30	2	2	N/A		1	2
			Unisex Disabled	1	1	1	N/A		1	1
6	Retail 03, 04 - 05 – Café / restaurant	20 (staff)	Male	10	1	1	0	0	1	1
			Female	10	1	1	N/A		1	1
			Unisex Disabled	1	1	1	N/A		1	1
6	Retail 03, 04 - 05 – Café / restaurant	200 (Patrons)	Male	100	1	1	2	3	2	2
			Female	100	3	4	N/A		2	5
			Unisex Disabled	1	1	1	N/A		1	1
6	Rooftop bar	20 (staff)	Male	10	1	1	0	0	1	1
			Female	10	1	1	N/A		1	1
			Unisex Disabled	1	1	1	N/A		1	1
6	Rooftop bar	180 (patrons)	Male	90	1	2	2	3	2	3
			Female	90	3	4	N/A		2	3
			Unisex Disabled	1	1	1	N/A		1	1

Notes:

1. A common unisex accessible facility may be counted once for both male and female facilities in accordance with Clause F4D3(3) of the BCA;
2. Staff and patrons are permitted to share the same facilities in accordance with Clause F4D4(5) of the BCA;
3. At least one ambulant sanitary compartment must be provided within each the male and female facilities complying with Section 16 of AS1428.1 - 2009.
4. A WC is able to be used in place of a urinal.

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