REBEL PROPERTY

SSDA BCA ASSESSMENT REPORT

164-172 and 174-194 William Street, Woolloomooloo

Project number: 119744
Revision: 1.0
Date: 25 August 2025

JENSEN HUGHES

Quality management

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<tr><th>Revision</th><th>Date</th><th colspan="2">Revision description</th></tr>
<tr><td>DRAFT</td><td>11 August 2025</td><td colspan="2">DRAFT SSDA BCA Assessment Report</td></tr>
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Jensen Hughes Pty Limited
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Executive summary

This BCA Assessment Report has been prepared by Jensen Hughes to accompany the proposed State Significant Development Application (SSDA) for a mixed-use infill affordable housing development at 164-172 and 174-194 William Street Woolloomooloo. The site is made up of two (2) lots. The legal description of the site is outlined in Table 1.

Table 1 Legal Description

Property Address	Title Description
164-172 William Street, Woolloomooloo	Lot 52 in DP1049805
174-194 William Street, Woolloomooloo	Lot 1 in DP816050

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-80211463).

This report concludes that the proposed development is suitable and warrants approval subject to the implementation of the following mitigation measures.

+ The matters for further consideration in Section 3.1 has been addressed
+ The Performance Solutions identified in Section 3.3 has been addressed

Following the implementation of the above mitigation measures, the remaining impacts are appropriate.

This document provides an assessment of the architectural design drawings for the proposed development at 164-172 and 174-194 William Street, Woolloomooloo, against the Deemed-to-Satisfy provisions of the Building Code of Australia (BCA) 2022 Amendment 2.

Below is a summary of the assessment which outlines the clauses which require further design or clarification.

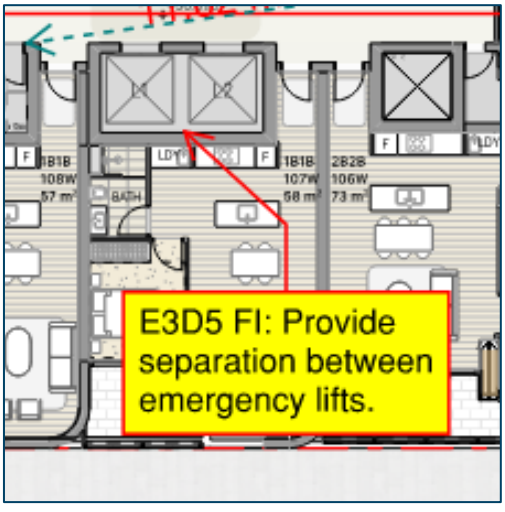
Part 3 'Matters for Further Consideration' of this report provides additional information for some of the below clauses where further explanation is required.

Any Performance Solution will need to be detailed in a separate report and must clearly indicate methodologies for achieving compliance with the relevant BCA Performance Requirements.

Item	Description	BCA Provision
Fire Related Performance solutions required		
1.	A Fire Engineered Performance Solution is required to address the following reduced FRL requirements: + To permit FRLs of Class 6 portions on Ground Floor to be reduced from FRL180 to FRL120 + To permit FRLs of Class 7b on Basement Levels to be reduced from FRL240 to FRL120 and specific areas to not require fire separation. + To permit FRLs of Class 7b on Retail Laneway Level to be reduced from FRL240 to FRL120.	C2D2, Spec 5

Item	Description	BCA Provision
	+ To permit FRLs of Class 7b / 8 (Loading Dock) on Plaza Level to be reduced from FRL240 to FRL120.	
2.	The length of the public corridors within the William Street building exceeds 40m in the following locations without smoke proof walls. A Fire Engineered Performance Solution is required to address the non-compliance: + Mezzanine Level to Level 03, corridor length is 50m in lieu of 40m + Level 04 to 07, corridor length is 45m in lieu of 40m	C3D15
3.	***If required***, where an access hatch is provided from the fire-stair to the roof for maintenance access, a Fire Engineered Performance Solution is required to address where the access hatch is not provided with an automatic closing operation as per C4D9 (2) & (3).	C4D9
4.	To address where the garbage chute shafts are not proposed to be enclosed at the bottom and in lieu extend to the garbage rooms.	S5C8
5.	There is roof lights provided to the William Street East & West building. A Fire Engineered Performance Solution is required to address the following departures from the deemed-to-satisfy provisions: + The rooflights occupy more than 20% of the roof area + The rooflights are within 3m of the boundary, a part of the building which projects above the roof that does not have an FRL + An adjoining SOU roof light where the bounding walls are required to be fire rated + A roof light within an adjoining fire separated section of the building	S5C16
6.	To permit a single exit in lieu of two exits to the following areas: + The Fire Pump Room & Fire Tank Room + Throughout the Forbes Street Building	D2D3
7.	To address the following departures from the deemed-to-satisfy provisions of BCA Clause D2D5: Class 2 areas: + To all residential levels; an extended exit travel distance of up to 12m in lieu of 6m to the nearest exit. + To Basement 1 Forbes St building; an extended exit travel distance of up to 17m in lieu of 6m to the nearest exit. + To Upper Ground Floor William St West building; an extended exit travel distance of up to 25m in lieu of 20m to a POC from the residential lobby. + To Plaza Level Dowling St building; an extended exit travel distance of up to 25m in lieu of 20m from the communal room. Class 6, 7 & 8 areas: + To all Basement levels; an extended exit travel distance of up to 30m in lieu of 20m to POC and up to 50m in lieu of 40m to the nearest exit. + To Plaza level; an extended exit travel distance of up to 30m in lieu of 20m to POC from retail tenancies.	D2D5

Item	Description	BCA Provision
8.	To address the following departures from the deemed-to-satisfy provisions of BCA Clause D2D6: + To all Basement levels; the distance between alternative exits is up to 70m in lieu of 60m. + To Plaza Level; the distance between alternative exits is up to 90m in lieu of 45m (for Class 2 portion) and 60m (for Class 6, 7 & 8) portion + To Retail Laneway level; the distance between alternative exits is up to 50m in lieu of 45m to the William Street buildings. + To William Street East building and Dowling Street building; the distance between alternative exits is as low as 7m in lieu of 9m apart. + To Plaza Level Dowling Street fire stairs, the distance between alternative exits is as low as 5m in lieu of 9m.	D2D6
9.	To address the following departures from the deemed-to-satisfy provisions of BCA Clause D2D12: + WE-FS01 & FPR-FS discharges into a shared corridor, in lieu of being provided with independent egress. + All fire stairs discharge into a covered area that is not open for at least 1/3 its perimeter + Forbes Street Fire Stair 01, Dowling Street both fire stairs, WE-FS-02 & B-FS-02. WW-FS-02 discharge path will require occupants to pass by unprotected openings. + Forbes Street Fire Stair 01, Dowling Street both fire stairs, WE-FS-02 & B-FS-02, WW-FS-02 discharge path is more than 6m to a road or open space.	D2D12
10.	There is a non-fire-isolated stairway connecting Level 08 & 09 of William St West building. The non-fire-isolated stairway does not comply with any of the deemed-to-satisfy provisions of this clause as it does not provide a continuous means of travel by its own flights and landings from every storey served to the level at which egress to a road or open space is provided. Therefore, a Fire Engineered Performance Solution is required to wholistically address the non-fire-isolated stair where it does not comply with D2D14.	D2D14
11.	To permit the Dowling Street Building alternative exits discharge adjacent to each other in lieu of as far apart as practical.	D2D15
12.	To address the lack of compliant separation between rising and descending stairs to the following locations: + Forbes Street Fire Stair 01 + Dowling Street Fire Stair + William Street West FS-01 & WW-LD 01 + William Street East FS-02 & B-FS-02	D3D5

Item	Description	BCA Provision
13.	The fire-isolated exits will discharge to the Plaza Level podium roof and egress route swill pass within 3m of openings for services and drainage	D3D13
14.	To permit the Plaza Level Forbes Street building lobby fire stair door to not swing in the direction of egress.	D3D25
15.	To permit the fire hydrant booster to be located in an area not within sight of the main entry into the building due to multiple building entrances.	E1D2 & AS2419.1-2021
16.	To omit fire hose reel coverage to the garbage / bin room enclosed in fire-rated construction and forming the base of the garbage shaft.	E1D3
17.	To address where the fire control room is not accessible via the front entrance of the building due to multiple building entrances.	E1D15 & S19C9
18.	To address the following special hazards: EV Charging, E-Bikes & Solar Panels.	E1D17 & E2D21
19.	To permit stair pressurisation to only be applied to the Forbes St basement fire stair in lieu of the entire exit.	E2D4
20.	***If required***, to omit the requirements of zone pressurisation to the Class 6, 7b & 8 portions of the building.	E2D6
21.	To address the penthouse lifts not being constructed as emergency lifts.	E3D5
Non-Fire Related Performance solutions required		
1.	The construction of external walls is such that they will prevent the penetration of water that could cause unhealthy or dangerous conditions or loss of amenity to occupants and undue dampness or deterioration of building elements.	F3D5
Building Code of Australia compliance matters to be addressed		
2.	William Street West building lifts are required to be emergency lifts. Fire separation of FRL 120/120/120 between the lift shafts is required to be provided throughout the entire lift shaft. 	E3D5

Item	Description	BCA Provision
3.	A central sanitary facility bank is proposed to the Plaza level however no details on the number of sanitary facilities have been provided. Further confirmation is required by the client regarding the intended use of each retail tenancy and overall expected number of persons accommodated.	F4D4
Further information required		
1.	The client is to confirm the expected number of persons to be accommodated within the building is as per the BCA Clause D2D18 assessment or otherwise provide indicative retail layouts with which the population can be calculated. Should any of the retail tenancies change in use, then the assessment is required to be updated.	D2D18
2.	The sprinkler valve enclosure must be located in a secure room or enclosure which has direct egress to a road or open space and be secured with a system suitable for use by the fire brigade. Architect and Fire Services consultant to confirm where the sprinkler valve enclosure is located within the building.	S17C6
3.	A dual water supply is required due to the building's effective height being greater than 25m. Architect and Fire Services consultant to confirm a dual water supply has been provided.	S17C7

NCC clause numbering

BCA2022 Amendment 2 uses a new structure and clause referencing system to create better consistency across all volumes of the NCC. While the new Section-Part-Type-Clause system makes the NCC look different at first, it's intended to improve user experience and make it more web accessible.

The new structure results in a reorganisation of specifications and parts, some of which are contained in the table below.

The NCC uses a uniform clause numbering system across each of its three volumes. This system is called Section-Part-Type-Clause (SPTC). In each clause number-

- The first letter indicates which NCC section or part it sits within;
- The first number indicates the number of the Part within a section or the number of a Specification.
- The second letter indicates the clause type. It will be either G, O, F, P, V, D, or C. and these are explained below.
- The second number is the clause number within each Part of Specification.

The clause Types used in the NCC are as follows:

- G = Governing requirements (mandatory)
- O = Objective (guidance)
- F = Functional Statement (guidance)
- P = Performance Requirement (mandatory)V = Verification Method (optional)
- D = Deemed-to-Satisfy Provision (optional)
- C = Clause in a Specification (can be mandatory or optional depending on how the Specification is called up by the NCC).

1.0 Basis of assessment

1.1 Location and description

The site is located at 164-172 and 174-194 William Street Woolloomooloo within the City of Sydney LGA. The site is comprised of multiple allotments and is legally described as:

- 164-172 William Street, Woolloomooloo
  - Lot 52 in DP1049805
- 174-194 William Street, Woolloomooloo
  - Lot 1 in DP816050

The land size totals 6,398m^2 and consists of a southern frontage to William Street, an eastern frontage to Dowling Street, a western frontage to Forbes Street and northern frontage to Judge Lane.

The subject building is a mixed-use development consisting of:

- Basement Carparking
- Ground Floor & Podium retail shops and food & beverage
- Residential Sole-Occupancy Units (SOUs) and ancillary communal areas

The subject building has multiple pedestrian entrances from Forbes, Dowling & William Street.

Vehicular entrance is appurtenant from Forbes Street.

1.2 Surrounding context

The immediate urban context surrounding the site is characterised by a mix of medium density residential, commercial, and retail uses. The site is in close proximity to Hyde Park, The Domain, and Rushcutters Bay Reserve. There are a number of educational and health services in proximity to the site, providing ample infrastructure support for the community.

William Street, to which the site fronts, is a classified road providing connection between the Eastern Suburbs of Sydney and the CBD. Vehicle access is currently provided from six points on the site from Judge Lane, Forbes Street, and Dowling Street. Pedestrian access to the site is currently available from all frontages.

The site is highly accessible to both bus and rail services, being approximately 300m away from Kings Cross Railway Station and having direct access to bus services on William Street that provide connections through the Metropolitan Transport Network.

At the time of lodgement, the site is improved by a warehouse style structure and glass office building to the site's frontage and an at-grade private carpark to the northwestern portion of the site.

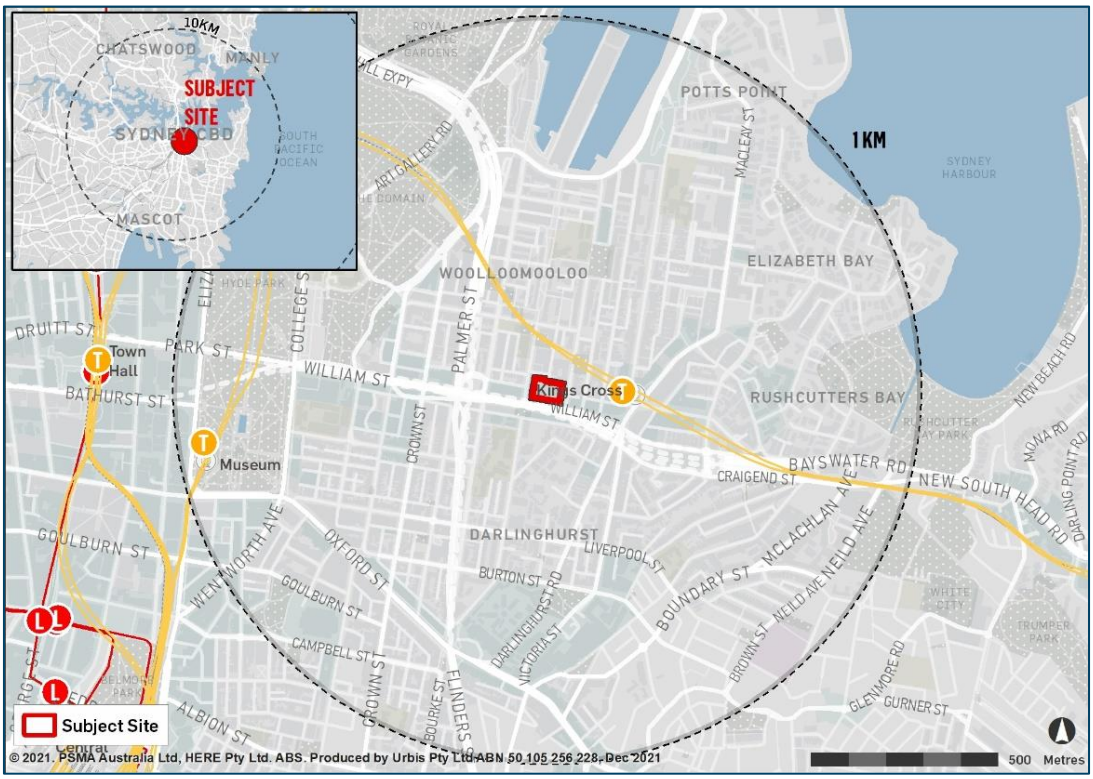


Figure 1: Local Context

Figure 2: The Site

1.3 Purpose

The purpose of this report is to assess the current design proposal against the Deemed-to-Satisfy Provisions of BCA, and to clearly outline those areas (if any) where compliance is not achieved, where areas may warrant redesign to achieve strict BCA compliance or where areas may be able to be assessed against the relevant performance criteria of BCA. Such assessment against relevant performance criteria will need to be addressed by means of a separate Performance-based Assessment (Performance Solution) Report to be prepared under separate cover.

1.4 Building Code of Australia

The National Construction Code (**NCC**) is Australia's primary set of technical design and construction provisions for buildings.

As a performance-based code, it sets the minimum required level for the safety, health, amenity, accessibility and sustainability of certain buildings. The Australian Building Codes Board, on behalf of the Australian Government and each State and Territory government, produces and maintains the National Construction Code.

The NCC has three (3) volumes being:

- Volume One - containing technical design and construction requirements for all Class 2 to 9 buildings
- Volume Two - containing technical design and construction requirements for certain residential (class 1) and non-habitable buildings and structures (Class 10).
- Volume Three - Containing technical requirements for the design and construction for plumbing and drainage systems in new and existing buildings

This report is based on the Deemed-to-Satisfy Provisions of the National Construction Code (**NCC**) Series Volume One – Building Code of Australia, 2022 Edition (**BCA**) Amendment 2, incorporating the State variations where applicable. Please note that the version of the BCA applicable to new building works is the version applicable at the time of the lodgement of the Construction Certificate application to the Accredited Certifying Authority. The BCA is currently updated on a three-yearly cycle.

A reference to the BCA in this report is a reference to **BCA2022 Amendment 2**, being volume 1 of the NCC.

1.5 Limitations

1. This report is not a Design Compliance Declaration (DCD) under the Design and Building Practitioners Act 2020, nor is it to be construed as such.
2. This report is limited to a visual assessment of the plans and specifications provided and does not include any assessment or interrogation of the BIM model or the like.
3. This report does not include nor imply any detailed assessment for design, compliance or upgrading for:
    a. the structural adequacy or design of the building;
    b. the inherent derived fire-resistance ratings of any proposed structural elements of the building (unless specifically referred to); and
    c. the design basis and/or operating capabilities of any proposed electrical, mechanical or hydraulic services.
4. This report does not include, or imply compliance with:

a. the National Construction Code – Plumbing Code of Australia Volume Three;

b. the Disability Discrimination Act 1992 including the Disability ((Access to Premises – Buildings) Standards 2010 – unless specifically referred to), (Note: The provision of access for people with a disability has not been assessed against the Deemed-to-Satisfy Provisions of Part D4 and Clauses E3D8, F4D5 and F4D12 of the BCA unless otherwise discussed in this report);

c. Demolition Standards not referred to by the BCA;

d. Work Health and Safety Act 2011;

e. Requirements of Australian Standards unless specifically referred to;

f. Requirements of other Regulatory Authorities including, but not limited to, Telecommunications Supply Authorities, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Local Council, ARTC, Department of Planning and the like; and

g. Conditions of Development Consent issued by the Local Consent Authority.

1.6 Design documentation

This report has been based on the Design plans and Specifications listed in **Appendix A** of this report.

2.0 Building description

For the purposes of the Building Code of Australia (BCA) the development may be described as follows.

2.1 Rise in storeys (clause C2D3)

The building has a rise in storeys of twenty-one.

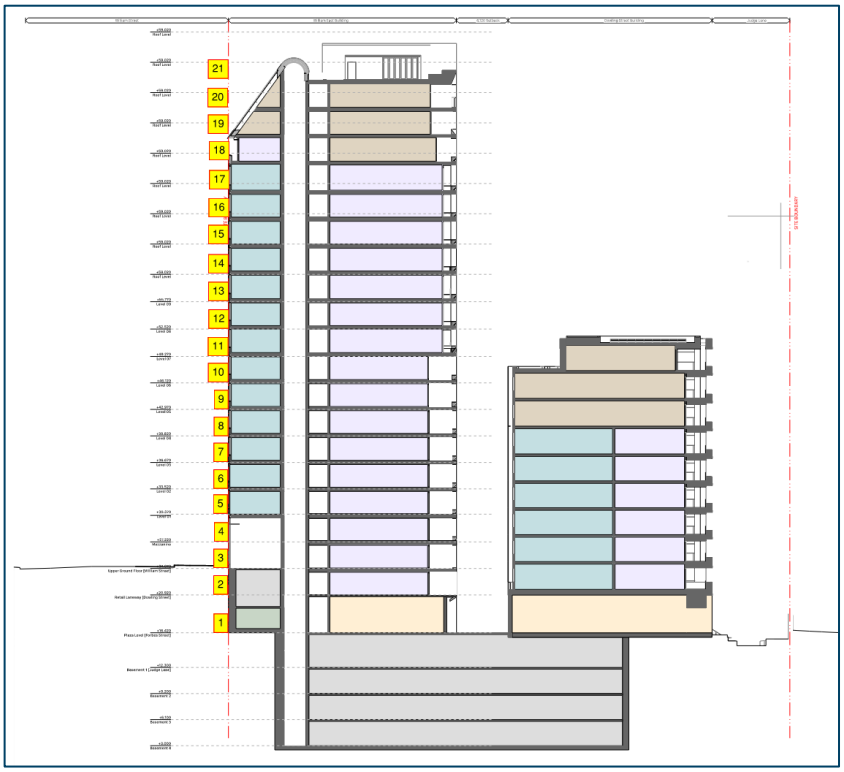


Figure 3: Rise in Storey

2.2 Classification (clause A6G1)

The building has been classified as follows.

Table 2 Building Classification(s)

Class	Level	Description
Class 7a & 7b	Basement 2 to 4	Carparking & Storage
Class 2 & 7a	Basement 1 / Judge Lane	Residential SOUs & Carparking
Class 2, 6, 7b / 8	Plaza Level - Forbes Street	Residential SOUs, Communal Residential Areas, Retail Tenancies, Storage & Loading Dock
Class 2, 7b	Retail Laneway – Dowling Street	Residential SOUs & Storage
Class 2, 6	Upper Ground Floor - William Street	Residential SOUs, Communal Residential Areas & Retail Tenancies

Class	Level	Description
Class 2	"Mezzanine" Level to Level 17	Residential SOUs & Communal Residential Areas

Note: The "Mezzanine" level is not a true mezzanine and has been considered within the rise in storey calculation.

2.3 Effective height (clause A1G4)

The building has an *effective height* of *more* than 25 metres and more than 50 metres at 69.87m (Level 17 RL82.17 – Basement Level 1 RL 12.30).

2.4 Type of construction required (table C2D2)

The building is required to be of Type A Construction.

2.5 Floor area and volume limitations (table C3D3)

The building is subject to maximum floor area and volume limits of:-

Class 6, 7, 8	Maximum Floor Area	5,000m^2
	Maximum Volume	30,000m^3
Class 7a	The carpark is to be provided with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17) and as such there are no maximum floor area or volume limitations for this area.	
Class 2	The Class 2 portions of the building are not subject to floor area and volume limitations of C3D3 as Part S5C11 (for Type A), Part S5C21 (for Type B) and Part S5C24 (for Type C) of Specification5 and Clause C4D12 of the BCA regulates the compartmentation and separation provisions applicable to buildings, or building portions, of Class 2 classifications.	

2.6 Fire compartments

The following fire compartments have been assumed:

1. The Basement levels containing Class 7a & 7b portions and the Plaza Level driveway ramp shall be considered a single fire compartment due to the connection of the driveway ramp
2. The Basement Level 1 / Judge Lane Class 2 shall be considered a separate single fire compartment
3. Upper Ground Floor – William Street Level and Plaza Level – Forbes Street shall be considered a single fire compartment due to the connection via the escalators and commuter stairs
4. The Retail Laneway – Dowling Street level shall be considered a separate single fire compartment
5. Each respective Class 2 storey from Mezzanine Level to Level 17 shall be considered as separate fire compartments.

2.7 Exits

The following points in the building have been considered as the exits: assumed:

Basement Levels

- The doorways leading to the fire-isolated exits

Plaza Level – Forbes Street

- The doorways leading to the fire-isolated exits
- The point at which open space is achieved towards Forbes Street
- The first riser of the stairway leading to the road / open space

Retail Laneway Level – Dowling Street

- The doorways leading to the fire-isolated exits

Upper Ground Floor – William Street

- The doorways leading to the fire-isolated exits
- The point at which open space is achieved towards William Street

Mezzanine Level to Level 08

- The doorways leading to the fire-isolated exits

Level 09

- The doorways leading to the fire-isolated exits
- The first riser of the non-fire isolated stair located in the William West building communal open area

Level 10 to Level 17

- The doorways leading to the fire-isolated exits

2.8 Climate zone

The building is located within Climate Zone 5.

2.9 Building importance level

Certain Australian Standards (particularly structural standards) require the Importance Level of the building to be determined. The importance level relates to the individual actions on a building listed in clause B1D3 of the BCA

From our assessment of the subject building, it is considered that the most appropriate Importance level is 03. The Importance Level should be confirmed with the client to ensure that this satisfies their expectations with respect to the use and operation of the building.

Table B1D3a of the BCA provides the following:

Importance Level	Building Types
1	Buildings or structures presenting a low degree of hazard to life and other property in the case of failure.
2	Buildings or structures not included in Importance Level 1, 3 and 4.
3	Buildings or Structures that are designed to contain a large number of people.
4	Buildings or Structures that are essential to post-disaster recovery or associated with hazardous facilities.

The Guide to the BCA provides a generic description of building types which have Importance Levels assigned. The Guide state that the “Importance Level” concept is applicable to building structural safety only. Specific examples from the Guide are provided below. The examples provided by the Guide are not exhaustive of all building types.

Importance Level 1:

- Farm buildings and farm sheds.
- Isolated minor storage facilities.
- Minor temporary facilities.

Importance Level 2:

- Low rise residential construction.
- Buildings and facilities below the limits set for Importance Level 3.

Importance Level 3:

- Buildings and facilities where more than 300 people can congregate in one area.
- Buildings and facilities with a primary school, a secondary school or day care facilities with a capacity greater than 250.
- Buildings and facilities with a capacity greater than 500 for colleges or adult educational facilities.
- Health care facilities with a capacity of 50 or more residents but not having surgery or emergency treatment facilities.
- Jails and detention facilities.
- Any occupancy with an occupant load greater than 5000.
- Power generating facilities, water treatment and waste water treatment facilities, any other public utilities not included in Importance Level 4.
- Buildings and facilities not included in Importance Level 4 containing hazardous materials capable of causing hazardous conditions that do not extend beyond property boundaries.

Importance Level 4:

- Buildings and facilities designated as essential facilities.
- Buildings and facilities with special post disaster functions.
- Medical emergency or surgery facilities.
- Emergency service facilities: fire, rescue, police station and emergency vehicle garages.

- Utilities required as backup for buildings and facilities of Importance Level 4.
- Designated emergency shelters.
- Designated emergency centres and ancillary facilities.
- Buildings and facilities containing hazardous materials capable of causing hazardous conditions that extend beyond property boundaries.
- Importance Levels must be assigned on a case by case basis.

2.10 Location of fire-source features

For the purposes of assessing the subject building with respect to the fire rating of external walls and the protection of the openings, the fire source features for the subject development are:

North: The far boundary of Judge Lane (>3m) and the neighbouring building (>3m)

South: The far boundary of William Street (>3m)

East: The far boundary of Dowling Street (>3m)

West: The far boundary of Forbes Street (>3m)

In accordance with Clause S5C2 of Specification 5, a part of a building element is exposed to a fire-source feature if any of the horizontal straight lines between that part and the fire-source feature, or vertical projection of the feature, is not obstructed by another part of the building that–

a. has an FRL of not less than 30/–/–; and

b. is neither transparent nor translucent.

3.0 Matters for further consideration

3.1 General

Assessment of the Architectural design documentation against the Deemed-to-Satisfy Provisions of the BCA has revealed the following areas where compliance with the BCA may require further consideration and/or may involve assessment as Performance-based *Performance Solutions*. Any *Performance Solutions* will be required to clearly indicate methodologies for achieving compliance with the relevant *Performance Requirements*.

Appendix D to this report provides a detailed assessment of the proposal against ALL relevant Deemed-to-Satisfy Provisions of the BCA. It is important that Appendix D is read in conjunction with the items below, as some matters may not have had sufficient information provided to allow a detailed assessment to be undertaken.

3.1.1 BCA Clause D2D18: Number of Persons Accommodated

No information from the client has been provided regarding the expected number of persons accommodated by the building. We have conducted a preliminary assessment based on Table D2D18 below.

Table D2D18 assigns a population based on area per person and use. We have applied these rates throughout all retail tenancies where required. It should be noted that the Plaza Level “Forbes Street” F&B tenancy has been provided with an indicative seat layout, and we have relied upon the number of seats to calculate population.

The client is to confirm the expected number of persons to be accommodated within the building is as per the table below or otherwise provide indicative retail layouts with which the population can be calculated. Should any of the retail tenancies change in use, then the below assessment is required to be updated.

Jensen Hughes Population Table						
Note 1: Staff population have been based on 10% of the Patron population						
Level / Zone	**Area within Zone**	**GFA (m2)**	**Population Density @ (m2/person)**	**Population**	**Aggregate Egress Width Required**	**Exit Width Provided**
Plaza Level Retail 01	FOH Retail	53	3	18	1	0.92
Plaza Level Retail 01	Staff			2		Note: at doorways the width is permitted to be reduced by 250mm.
Plaza Level Retail 02	FOH Retail	55	3	19	1	0.92
Plaza Level Retail 02	Staff			2		Note: at doorways the width is permitted to be reduced by 250mm.
Plaza Level Retail 02A	FOH Retail	60	3	20	1	1.84
Plaza Level Retail 02A	Staff			2		
Plaza Level Retail 04	FOH Retail	314	3	105	1.25	5.52
Plaza Level Retail 04	Staff			11		
Plaza Level Retail 05	FOH Retail	219	3	73	1	3.68
Plaza Level Retail 05	Staff			8		
Plaza Level "Forbes Street" F&B Tenancy	FOH Retail	119	As per seat count	45	1	0.92
Plaza Level "Forbes Street" F&B Tenancy	Staff			5		
Upper Ground Floor Retail 07	FOH Retail	250	3	84	1	1.84
Upper Ground Floor Retail 07	Staff			9		
Upper Ground Floor Retail 08	FOH Retail	119	3	40	1	1.84
Upper Ground Floor Retail 08	Staff			4		
Upper Ground Floor Retail 09	FOH Retail	73	3	25	1	1.84
Upper Ground Floor Retail 09	Staff			3		
Upper Ground Floor Retail 10	FOH Retail	43	3	15	1	1.84
Upper Ground Floor Retail 10	Staff			2		
Upper Ground Floor Retail 11	FOH Retail	107	3	36	1	1.84
Upper Ground Floor Retail 11	Staff			4		
Summary of Population						
Total Retail Shop Patrons	435					
Total Retail Shop Employees	52					
Total Retail F&B Patrons	45					

3.1.2 BCA Clause S17C6: Sprinkler Valve Enclosure

The sprinkler valve enclosure must be located in a secure room or enclosure which has direct egress to a road or open space and be secured with a system suitable for use by the fire brigade.

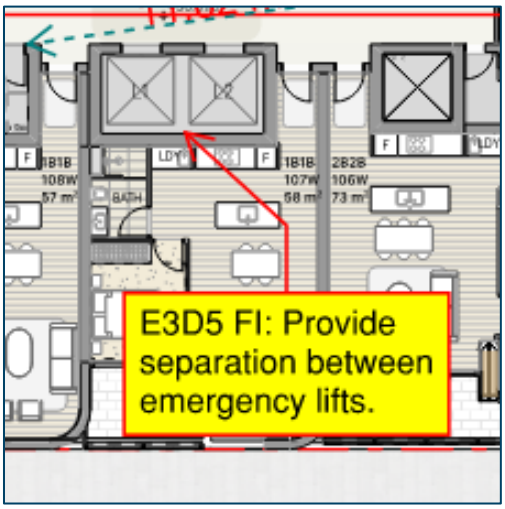
Architect and Fire Services consultant to confirm where the sprinkler valve enclosure is located within the building.

3.1.3 BCA Clause S17C7: Water Supply

A dual water supply is required due to the building's effective height being greater than 25m. Architect and Fire Services consultant to confirm a dual water supply has been provided.

3.1.4 BCA Clause E3D5: Emergency Lifts

William Street West building lifts are required to be emergency lifts. Fire separation of FRL 120/120/120 between the lift shafts is required to be provided throughout the entire lift shaft.



3.1.5 BCA Clause F4D4: Sanitary Facilities

A central sanitary facility bank is proposed to the Plaza level however no details on the number of sanitary facilities have been provided. It should be noted that there is only one retail tenancy proposed as a food and beverage tenancy. Should any other tenancy be proposed as a food and beverage tenancy, then the below assessment is required to be updated.

The following sanitary facilities are required based upon the expected number of persons accommodated as per Table D2D18, however noting further confirmation is required by the client regarding the intended use of each tenancy and overall expected number of persons accommodated;

Sanitary Facility Requirements						
Total Employees						
Class of Building	**Table F4D4a**	**User**		**Min Number of:**		
				Closet Pans	**Urinals**	**Washbasins**
3, 5, 6 and 9 -		**Employees**				
Other than school		**Males =**	**26**	**2**	**2**	**1**
		Females =	**26**	**2**		**1**
Retail F&B						
Class of Building	**Table F4D4a**	**User**		**Min Number of:**		
				Closet Pans	**Urinals**	**Washbasins**
6-		**Patrons**				
Restaurant, Cafe, Bar		**Males =**	**23**	**1**	**1**	**1**
		Females =	**23**	**1**		**1**

3.2 Dimensions and tolerances

The BCA contains the minimum standards for building construction and safety, and therefore generally stipulates minimum dimensions which must be met. Jensen Hughes's assessment of the plans and specifications has been undertaken to ensure the minimum dimensions have been met.

The designer and builder should ensure that the minimum dimensions are met onsite, and consideration needs to be given to construction tolerances for wall set outs, applied finishes and skirtings to corridors and bathrooms for example, tiling bed thicknesses and the like which can adversely impact on critical matters such as access for people with disabilities, stair and corridor widths and balustrade heights.

3.3 Performance-based design – performance solutions

There are specific areas throughout the development where strict Deemed-to-Satisfy BCA Compliance may not be achieved by the proposed design and site constraints. These matters may need to be addressed in a detailed Performance Solution and/or Fire Engineering Report, to be prepared for this development under separate cover:

Item	Description	BCA Provision
Fire Related Performance solutions required		
1.	A Fire Engineered Performance Solution is required to address the following reduced FRL requirements: + To permit FRLs of Class 6 portions on Ground Floor to be reduced from FRL180 to FRL120 + To permit FRLs of Class 7b on Basement Levels to be reduced from FRL240 to FRL120 and specific areas to not require fire separation. + To permit FRLs of Class 7b on Retail Laneway Level to be reduced from FRL240 to FRL120. + To permit FRLs of Class 7b / 8 (Loading Dock) on Plaza Level to be reduced from FRL240 to FRL120.	C2D2, Spec 5

Item	Description	BCA Provision
2.	The length of the public corridors within the William Street building exceeds 40m in the following locations without smoke proof walls. A Fire Engineered Performance Solution is required to address the non-compliance: + Mezzanine Level to Level 03, corridor length is 50m in lieu of 40m + Level 04 to 07, corridor length is 45m in lieu of 40m	C3D15
3.	***If required***, where an access hatch is provided from the fire-stair to the roof for maintenance access, a Fire Engineered Performance Solution is required to address where the access hatch is not provided with an automatic closing operation as per C4D9 (2) & (3).	C4D9
4.	To address where the garbage chute shafts are not proposed to be enclosed at the bottom and in lieu extend to the garbage rooms.	S5C8
5.	There is roof lights provided to the William Street East & West building. A Fire Engineered Performance Solution is required to address the following departures from the deemed-to-satisfy provisions: + The rooflights occupy more than 20% of the roof area + The rooflights are within 3m of the boundary, a part of the building which projects above the roof that does not have an FRL + An adjoining SOU roof light where the bounding walls are required to be fire rated + A roof light within an adjoining fire separated section of the building	S5C16
6.	To permit a single exit in lieu of two exits to the following areas: + The Fire Pump Room & Fire Tank Room + Throughout the Forbes Street Building	D2D3
7.	To address the following departures from the deemed-to-satisfy provisions of BCA Clause D2D5: Class 2 areas: + To all residential levels; an extended exit travel distance of up to 12m in lieu of 6m to the nearest exit. + To Basement 1 Forbes St building; an extended exit travel distance of up to 17m in lieu of 6m to the nearest exit. + To Upper Ground Floor William St West building; an extended exit travel distance of up to 25m in lieu of 20m to a POC from the residential lobby. + To Plaza Level Dowling St building; an extended exit travel distance of up to 25m in lieu of 20m from the communal room. Class 6, 7 & 8 areas: + To all Basement levels; an extended exit travel distance of up to 30m in lieu of 20m to POC and up to 50m in lieu of 40m to the nearest exit. + To Plaza level; an extended exit travel distance of up to 30m in lieu of 20m to POC from retail tenancies.	D2D5
8.	To address the following departures from the deemed-to-satisfy provisions of BCA Clause D2D6:	D2D6

Item	Description	BCA Provision
	+ To all Basement levels; the distance between alternative exits is up to 70m in lieu of 60m. + To Plaza Level; the distance between alternative exits is up to 90m in lieu of 45m (for Class 2 portion) and 60m (for Class 6, 7 & 8) portion + To Retail Laneway level; the distance between alternative exits is up to 50m in lieu of 45m to the William Street buildings. + To William Street East building and Dowling Street building; the distance between alternative exits is as low as 7m in lieu of 9m apart. + To Plaza Level Dowling Street fire stairs, the distance between alternative exits is as low as 5m in lieu of 9m.	
9.	To address the following departures from the deemed-to-satisfy provisions of BCA Clause D2D12: + WE-FS01 & FPR-FS discharges into a shared corridor, in lieu of being provided with independent egress. + All fire stairs discharge into a covered area that is not open for at least 1/3 its perimeter + Forbes Street Fire Stair 01, Dowling Street both fire stairs, WE-FS-02 & B-FS-02, WW-FS-02 discharge path will require occupants to pass by unprotected openings. + Forbes Street Fire Stair 01, Dowling Street both fire stairs, WE-FS-02 & B-FS-02, WW-FS-02 discharge path is more than 6m to a road or open space.	D2D12
10.	There is a non-fire-isolated stairway connecting Level 08 & 09 of William St West building. The non-fire-isolated stairway does not comply with any of the deemed-to-satisfy provisions of this clause as it does not provide a continuous means of travel by its own flights and landings from every storey served to the level at which egress to a road or open space is provided. Therefore, a Fire Engineered Performance Solution is required to wholistically address the non-fire-isolated stair where it does not comply with D2D14.	D2D14
11.	To permit the Dowling Street Building alternative exits discharge adjacent to each other in lieu of as far apart as practical.	D2D15
12.	To address the lack of separation between rising and descending stairs to the following locations: + Forbes Street Fire Stair 01 + Dowling Street Fire Stair + William Street West FS-02 & WW-LD 01 + William Street East FS-02 & B-FS-02	D3D5
13.	The fire-isolated exits will discharge to the Plaza Level podium roof and egress route swill pass within 3m of openings for services and drainage	D3D13

Item	Description	BCA Provision
14.	To permit the Plaza Level Forbes Street building lobby fire stair door to not swing in the direction of egress.	D3D25
15.	To permit the fire hydrant booster to be located in an area not within sight of the main entry into the building due to multiple building entrances.	E1D2 & AS2419.1-2021
16.	To omit fire hose reel coverage to the garbage / bin room enclosed in fire-rated construction and forming the base of the garbage shaft.	E1D3
17.	To address where the fire control room is not accessible via the front entrance of the building due to multiple building entrances.	E1D15 & S19C9
18.	To address the following special hazards: EV Charging, E-Bikes & Solar Panels.	E1D17 & E2D21
19.	To permit stair pressurisation to only be applied to the Forbes St basement fire stair in lieu of the entire exit.	E2D4
20.	***If required***, to omit the requirements of zone pressurisation to the Class 6, 7b & 8 portions of the building.	E2D6
21.	To address the penthouse lifts not being constructed as emergency lifts.	E3D5
Non-Fire Related Performance solutions required		
1.	The construction of external walls is such that they will prevent the penetration of water that could cause unhealthy or dangerous conditions or loss of amenity to occupants and undue dampness or deterioration of building elements.	F3D5

Appendix A Design documentation

This report has been based on the following design documentation.

Table 3 Architectural plans

Architectural plans prepared by FJC Studio			
Drawing Number	**Revision**	**Date**	**Title**
DR - 2000	NA	08/08/25	Judge Lane
DR - 2001	NA	08/08/25	Plaza Level - Forbes Street
DR - 2002	NA	08/08/25	Retail Laneway - Dowling Street
DR - 2003	NA	08/08/25	Upper Ground Floor - William Street
DR - 2004	NA	08/08/25	Mezzanine Level
DR - 2005	NA	08/08/25	Level 01-02
DR - 2006	NA	08/08/25	Level 03
DR - 2007	NA	08/08/25	Level 04
DR - 2008	NA	08/08/25	Level 05-06
DR - 2009	NA	08/08/25	Level 07
DR - 2010	NA	08/08/25	Level 08
DR - 2011	NA	08/08/25	Level 09
DR - 2012	NA	08/08/25	Level 10
DR - 2013	NA	08/08/25	Level 11-13
DR - 2014	NA	08/08/25	Level 14 - William East - Setback B
DR - 2015	NA	08/08/25	Level 15
DR - 2016	NA	08/08/25	Level 16 - William East - Penthouse
DR - 2017	NA	08/08/25	Level 17 - William East - Penthouse Terrace
DR - 2018	NA	08/08/25	Basement 01
DR - 2019	NA	05/08/25	Basement 02
DR - 2020	NA	05/08/25	Basement 03
DR - 3101	NA	05/08/25	Basement 04
DR - 3102	NA	05/08/25	North Elevation - William Street Building
DR - 3103	NA	05/08/25	West Elevation - William Street Building
DR - 3104	NA	05/08/25	South Elevation - William Street Building
DR - 3105	NA	05/08/25	East Elevation - William Street Building

Architectural plans prepared by FJC Studio			
DR - 3106	NA	05/08/25	East Elevation - Through Site Link
DR - 3107	NA	05/08/25	West Elevation - Through Site Link
DR - 3108	NA	05/08/25	South Section - Forbes and Dowling Street Building
DR - 3109	NA	05/08/25	North Section - William Street Building

Appendix B Essential services

The following fire safety measures are required to be installed in the building. The following table may be required to be updated as the design develops and options for compliance are confirmed, including any omissions or additions as a result of the fire engineering processes.

This section provides information for the design team, including service designers, and may need to be updated upon receipt of final designs and performance solutions at the construction approval stage.

Table 4 Essential fire safety measures

Item	Essential Fire and Other Safety Measures	Standard of Performance
Fire Resistance (Floors – Walls – Doors – Shafts)		
1.	Access Panels & doors/hoppers (fire rated)	**BCA2022 C4D14** (Openings in Shafts) **BCA2022 Specification 12** AS 1905.1:2015 (Fire Resistant Door sets) AS 1905.2:2005 (Fire Resistant roller shutters)
2.	Construction Joints	**BCA2022 C2D2, Specification 5** **BCA2022 C4D16** AS 1530.4:2014 & AS 4072.1:2005
3.	Fire doors	**BCA2022 C3D13** (Separation of Equipment) **BCA2022 C3D14** (Electricity Supply Systems) **BCA2022 C4D6** (Doors in Fire Walls) **BCA2022 C4D9** (Openings in Fire Isolated Exits) **BCA2022 C4D11** (Opening in Fire Isolated Lift Shafts) AS1735.11- 1986 **BCA2022 C4D12** (Bounding Construction) **BCA2022 C4D14** (Opening in Shafts) **Specification 19** (Fire Control Centres) **Specification 12** AS1905.1: 2015
4.	Fire seals protecting openings in fire resisting components of the building	**BCA2022 C4D15** (Openings for service installations) **BCA2022 C4D16** (Construction joints) **BCA2022 Specification 13** AS1530.4:2014 & AS4072.1-2005
5.	Lightweight construction	**BCA2022 C2D2, Specification 5** **BCA2022 C2D9, Specification 6** **BCA2022 C4D12** (Bounding Construction) AS1530.4:2014
General		
6.	Fire control rooms + >25m	**BCA2022 E1D15, Specification 19** (Fire Control Centres)

Item	Essential Fire and Other Safety Measures	Standard of Performance
	+ Fire Control Room - 300mm of street + Fire Control Room - >50m	
7.	Portable fire extinguishers	**BCA2022 E1D14** AS 2444–2001
General Egress		
8.	Automatic fail safe devices + Auto open Sliding Exit doors + Break Glass release	**BCA2022 D3D26** (Operation of Latches) **BCA2022 D3D27** (Re-entry from fire-isolated stairs) AS 1670.1:2018 (Fire)
9.	Operation of Door latches + Failsafe + Manual Push Button Control	**D3D26** (Operation of Latch) AS 1670.1:2018
10.	Required Automatic Doors	**D3D24** (Doorways and Doors)
11.	Swing of Exit Doors	**D3D24** (Swinging Doors)
12.	Warning & operational signs	**BCA2022 D3D28** (Signs on Fire Doors) **BCA2022 D4D7** (Braille Exit Signs) (Note: **E4D5** (Exit Signs)) **BCA2022 E3D4** (Lift Signs) **BCA2022 Specification 19** (Fire Control Room)
Lifts		
13.	Access to Lift Pits + Located at lowest level or if >3m provided through an access door	**BCA2022 D2D22** (Access to Lift Pits) 'DANGER LIFT WELL – ENTRY OF UNAUTHORISED PERSONS PROHIBITED – KEEP CLEAR AT ALL TIMES'
14.	Emergency lifts	**BCA2022 E3D5** AS 1735.1:2003 (Appendix A) or AS 1735.2:2001
15.	Stretcher Lifts including + Fire Service Controls + Recall Operation + Drive control switch	**BCA2022 E3D3** **BCA2022 E3D9** (Fire Service Controls) **BCA2022 E3D11** (Fire Service Recall Operation Switch) **BCA2022 E3D12** (Lift Car Fire Service drive control switch) **BCA2022 Specification 24** AS 1735.11:1986 (Fire rated landing doors)
Electrical Services		
16.	Automatic fail-safe devices	**BCA2022 D3D26** (Operation of Latches)

Item	Essential Fire and Other Safety Measures	Standard of Performance
	+ Auto open Sliding Exit doors + Break Glass release	**BCA2022 D3D27** (Re-entry from fire-isolated stairs) AS1670.1:2018 (Fire)
17.	Automatic fire detection & alarm: + Clause S20C3 – AS 3786:2014 Smoke Alarm systems powered from consumer mains to all residential SOU's, and spaced, interlinked to AS 1670.1:2018 to all common areas connected to a BOWS @ 85dB(A). + Clause S20C4 – AS 1670.1:2018 system throughout the building/part connected to a BOWS @ 100dB(A) + Incorporating a thermal detection system in the basement carpark Note: if there is a SSISEP or EWIS applies different dB(A) i.e. At bedheads not SOU doors.	**BCA2022 Part E2**, NSW Part E2 Specification 20 **BCA2022 C4D6** (Doors in Fire Walls) **BCA2022 C4D9** (Openings in Fire-Isolated Exits) **BCA2022 C4D12** (Bounding Construction) **BCA2022 D3D26** (Operation of Latch) **Specification 12**, **BCA2022 S20C3** (Smoke alarm system) **BCA2022 S20C4** (Smoke detection system) **BCA2022S20C5** (Combined smoke alarm and smoke detection system) **BCA2022S20C6** (Smoke detection for smoke control systems) **BCA2022S20C7** (BOWS) AS 3786:2014 (Amdt 1-4) AS 1670.1:2018 (Fire) – Section 4 and 5 (Detectors) AS 1670.1:2018 (Fire) – Section 7 (Smoke Control) AS 1670.3:2018 (Fire Alarm Monitoring) AS 1670.4:2018 (EWIS)
18.	Emergency lighting	**BCA2022 E4D2, E4D4** AS/NZS 2293.1:2018
19.	Exit signs	**BCA2022 E4D55** (Exit Signs) **BCA2022 E4D6** (Direction Signs) **BCA2022 E4D7** (Residential Concession) **BCA2022 E4D8** (Design and Operation - Exits) AS/NZS 2293.1:2018
20.	Emergency warning and intercom systems for Emergency Purposes	**BCA2022 E4D9** AS 1670.4 (Amdt 1) (EWIS)
Hydraulic Services		
21.	Automatic fire suppression systems	**BCA2022 E1D4, E1D5, E1D6, E1D9, BCA2022 Specification 17** AS 2118.1:2017 (Sprinklers) AS 2118.6:2012 (Combined Sprinklers/Hydrant)
22.	Fire hydrant systems + NSW Storz Couplings + Ring Main required (LIB, >25m) + Fire Brigade Relay Pump (>50m)	**BCA2022 E1D2** **BCA2022 C3D13 (Separation of Equipment)** AS 2419.1:2021

Item	Essential Fire and Other Safety Measures	Standard of Performance
	+ On-site water storage (>25m)	FRNSW Technical Sheet D15/45534.V9 issued 10.01.19, 'Compatible Hose Connections'
23.	Hose reel systems	**BCA2022 E1D3** AS 2441:2005
24.	Wall-wetting sprinkler / drenchers	**BCA2022 C4D5,** AS 2118.2: Wall-wetting sprinkler / drenchers
Mechanical Services		
25.	Fire dampers	**BCA2022 E2, Specification 20, Specification 21** **BCA2022 C4D16** AS 1668.1:2015 (Amdt 1) AS 1682.1:2015 & AS 1682.2:2015
26.	1. Mechanical air handling systems 2. Smoke Control System/Smoke Exhaust System 3. Mechanical ventilation to carpark. 4. Auto-shutdown of Air-handling System. + Any system that recycles air from one fire compartment to another, or operates in a manner that may spread smoke and does not operate as a smoke control system as per AS 1668.1:2015; + miscellaneous exhaust are systems installed as per Section 5 and 6 of AS 1668.1:2015; + non-ducted individual room units with a capacity of not more than 1000 L/s; or + miscellaneous exhaust are systems installed as per Section 5 and 6 of AS 1668.1:2015. 5. Zone Pressurisation System (if required) 6. Fire Isolated Exit Pressurisation System	**BCA2022 E2,** **Specification 20, Specification 21** AS 1668.1:2015 (Amdt 1) **Note**: 5.5.3 Override control To enable manual control by attending emergency services personnel, fans that are not required to shut down on initiation of fire mode in the car park shall be provided with a control switch at the designated building entry point. **Note**: Signage should be located at the car park entry indicating the location of the control switches.

E2D3 General Requirements

1. An air-handling system which does not form part of a smoke hazard management system in accordance with E2D4 to E2D20 and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must, subject to (2), be designed and installed—
   a. to operate as a smoke control system in accordance with AS 1668.1; or
   b. such that it—
      i. incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and
      ii. is arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1.
2. For the purposes of (1), each sole-occupancy unit in a Class 2 building is treated as a separate fire compartment.
3. Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with these Sections of the Standard.
4. A smoke detection system must be installed in accordance with S20C6 to operate AS 1668.1 systems that are provided for zone pressurisation and automatic air pressurisation for fire-isolated exits

Appendix C Fire resistance levels

The following fire resistance levels (FRL's) are required for the various building elements, with a fire source feature being the far boundary of a road adjoining the allotment, a side or rear boundary or an external wall of another building on the allotment except a Class 10 structure.

Type A construction

Table 5 Type A construction

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

Distance from a fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2	Class 7a	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	180/180/180	240/240/180
3m, or more	90/60/30	120/60/30	180/120/90	240/180/90

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

Distance from a fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2	Class 7a	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
3m, or more	-/-/-	-/-/-	-/-/-	-/-/-

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

Column Type	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2	Class 7a	Class 6	Class 7b or 8
Loadbearing	90/-/-	120/-/-	180/-/-	240/-/-
Non-loadbearing	-/-/-	-/-/-	-/-/-	-/-/-

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

Wall Type	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2	Class 7a	Class 6	Class 7b or 8
Loadbearing or non-bearing	90/90/90	120/120/120	180/180/180	240/240/240

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

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2	Class 7a	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 unit	90/90/90	120/-/-	180/-/-	240/-/-
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion	90/90/90	120/90/90	180/120/120	240/120/120

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

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2	Class 7a	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 unit	-/60/60	-/-/-	-/-/-	-/-/-
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion	-/90/90	-/90/90	-/120/120	-/120/120

Table S5C11g: Table 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	Class 7a	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

N.B. There are FRL concessions applicable for fully sprinkler protected car park portions under Clause S5C19 of BCA Specification 5, reducing the carpark FRL's down from 120/120/120 to 60/60/60.

Appendix D Detailed BCA 2022 Amendment 2 Assessment

Outlined below is a detailed assessment of the design under the Deemed-to-Satisfy Provisions of the Building Code of Australia (BCA) including the State variations where applicable.

All Deemed-to-Satisfy clauses that are applicable to the subject building have been referred to below, including a comment adjacent to each clause of the proposal's ability to satisfy each respective clause.

The abbreviations outlined below have been used in the following table.

N/A	Not Applicable. The Deemed-to-Satisfy clause is not applicable to the proposed design.
Complies	The relevant provisions of the Deemed-to-Satisfy clause have been satisfied by the proposed design.
CRA – Refer Appendix F	'COMPLIANCE READILY ACHIEVABLE'. It is considered that there is not enough information included in the documentation to accurately determine strict compliance with the individual clause requirements. However, with further design development, compliance can readily be achievable. This item is to be read in conjunction with the BCA Specification included within Appendix F of this report.
FI	Further Information is necessary to determine the compliance potential of the building design.
PS	Performance Solution with respect to this Deemed-to-Satisfy Provision is necessary to satisfy the relevant Performance Requirements.
DNC	Does Not Comply.
Noted	BCA Clause simply provides a statement not requiring specific design comment or confirmation.
Base Building	A base building element and the proposed works do not unduly reduce the level of fire protection or structural adequacy of the existing.

Note: The previous clause reference from BCA2019 has been included in brackets (e.g. [2019: B1.0]) to provide assistance to the reader and to outline where clauses have been changed or added. The term [new to BCA2022] has been used where the requirements are new to the BCA.

Deemed to Satisfy clause assessment

Table 6 Deemed to Satisfy clause assessment

Section B: Structure

Section B: Structure			
Clause	**Clause Requirements**	**Comment**	**Status**
Part B1 – Structural Provisions Section B is a specialist area that outlines the design requirements for the building including loads, actions and relevant Australian Standards. Compliance with Section B generally requires detailed design by a combination of consultants which may include Geotechnical, Structural and Façade. Given the specialist nature of Section B, and the need for design by other consultants, it is not within the scope of this BCA Assessment Report.			
B1D1: Deemed-to-Satisfy Provisions [2019: B1.0]	Informational	Noted	Noted
B1D2: Resistance to actions [2019: B1.1]	The resistance of a building or structure must be greater than the most critical action effect resulting from different combinations of actions, where— (a) the most critical action effect on a building or structure is determined in accordance with B1D3 and the general design procedures contained in AS/NZS 1170.0; and (b) the resistance of a building or structure is determined in accordance with B1D4.	Structural Engineer to certify at CC stage.	CRA – Refer Appendix F
B1D3: Determination of individual actions [2019: B1.2]	The magnitude of individual actions must be determined in accordance with the following: (a) Permanent actions: (i) the design or known dimensions of the building or structure; and (ii) the unit weight of the construction; and	Structural Engineer to certify at CC stage.	CRA – Refer Appendix F

Section B: Structure			
Clause	**Clause Requirements**	**Comment**	**Status**
	(iii) AS/NZS 1170.1; and (iv) for a Class 7b building, a notional additional permanent roof load of not less than 0.15 kPa to support the addition of solar photovoltaic panels. (b) Imposed actions: (i) the known loads that will be imposed during the occupation or use of the building or structure; and (ii) construction activity actions; and (iii) AS/NZS 1170.1. (c) Wind, snow and ice and earthquake actions: (i) the applicable annual probability of design event for safety, determined by— (A) assigning the building or structure an Importance Level in accordance with Table B1D3a; and (B) determining the corresponding annual probability of exceedance in accordance with Table B1D3b; and (ii) AS/NZS 1170.2; and (iii) AS/NZS 1170.3 as appropriate; and (iv) AS 1170.4 as appropriate; and (v) in cyclonic areas, metal roof cladding, its connections and immediate supporting members must comply with Specification 4; and (vi) for the purposes of (v), cyclonic areas are those determined as being located in wind regions C and D in accordance with AS/NZS 1170.2. (d) Actions not covered in (a), (b) and (c) above: (i) the nature of the action; and (ii) the nature of the building or structure; and		

Section B: Structure			
Clause	**Clause Requirements**	**Comment**	**Status**
	(iii) the Importance Level of the building or structure determined in accordance with Table B1D3a; and (iv) AS/NZS 1170.1. (e) For the purposes of (d) the actions include but are not limited to— (i) liquid pressure action; and (ii) ground water action; and (iii) rainwater action (including ponding action); and (iv) earth pressure action; and (v) differential movement; and (vi) time dependent effects (including creep and shrinkage); and (vii) thermal effects; and (viii) ground movement caused by— (A) swelling, shrinkage or freezing of the subsoil; and (B) landslip or subsidence; and (C) siteworks associated with the building or structure; and (ix) construction activity actions.		
B1D4: Determination of structural resistance of materials and forms of construction [2019: B1.4]	The structural resistance of materials and forms of construction must be determined in accordance with the following, as appropriate: (a) Masonry (including masonry-veneer, unreinforced masonry and reinforced masonry): AS 3700, except— (i) '(for piers—isolated or engaged)' is removed from Clause 8.5.1(d); and (ii) where Clause 8.5.1 requires design as for unreinforced masonry in accordance with Section 7,	Structural Engineer to certify at CC stage.	CRA – Refer Appendix F

Section B: Structure			
Clause	**Clause Requirements**	**Comment**	**Status**
	the member must also be designed as unreinforced masonry in accordance with Tables 10.3 and 4.1(a)(i)(C) of AS 3700. (b) Concrete: (i) Concrete construction (including reinforced and prestressed concrete): AS 3600. (ii) Autoclaved aerated concrete: AS 5146.1 and AS 5146.3. (iii) Post-installed and cast-in fastenings: AS 5216. (c) Steel construction: (i) Steel structures: AS 4100. (ii) Cold-formed steel structures: AS/NZS 4600. (iii) Residential and low-rise steel framing: NASH Standard – Residential and Low-Rise Steel Framing Part 1 or Part 2. (d) Composite steel and concrete: AS/NZS 2327. (e) Aluminium construction: AS/NZS 1664.1 or AS/NZS 1664.2. (f) Timber construction: (i) Design of timber structures: AS 1720.1. (ii) Timber structures: AS 1684.2, AS 1684.3 or AS 1684.4. (iii) Nail plated timber roof trusses: AS 1720.5. (g) Piling: AS 2159. (h) Glazed assemblies: (i) The following glazed assemblies in an external wall must comply with AS 2047: (A) Windows excluding those listed in (ii).		

Section B: Structure			
Clause	**Clause Requirements**	**Comment**	**Status**
	(B) Sliding and swinging glazed doors with a frame, including french and bi-fold doors with a frame. (C) Adjustable louvres. (D) Shopfronts. (E) Window walls with one piece framing. (ii) All glazed assemblies not covered by (i) and the following glazed assemblies must comply with AS 1288: (A) All glazed assemblies not in an external wall. (B) Revolving doors. (C) Fixed louvres. (D) Skylights, roof lights and windows in other than the vertical plane. (E) Sliding and swinging doors without a frame. (F) Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047. (G) Second-hand windows, re-used windows and recycled windows. (H) Heritage windows. (I) Glazing used in balustrades and sloping overhead glazing. (i) Termite Risk Management: Where a primary building element is subject to attack by subterranean termites: AS 3660.1, and— (i) for the purposes of this provision, a primary building element consisting entirely of, or a combination of, any of the following materials is considered not subject to termite attack:		

Section B: Structure			
Clause	**Clause Requirements**	**Comment**	**Status**
	(A) Steel, aluminium or other metals. (B) Concrete. (C) Masonry. (D) Fibre-reinforced cement. (E) Timber — naturally termite resistant in accordance with Appendix C of AS 3660.1. (F) Timber — preservative treated in accordance with Appendix D of AS 3660.1; and (ii) a durable notice must be permanently fixed to the building in a prominent location, such as a meter box or the like, indicating— (A) the termite management system used; and (B) the date of installation of the system; and (C) where a chemical is used, its life expectancy as listed on the appropriate authority's pesticides register label; and (D) the installer's or manufacturer's recommendations for the scope and frequency of future inspections for termite activity. (j) Roof construction (except in cyclonic areas): (i) Terracotta, fibre-cement and timber slates and shingles: AS 4597. (ii) Roof tiling: AS 2050. (iii) Cellulose cement corrugated sheets: AS/NZS 2908.1 with safety mesh installed in accordance with AS 1562.3 clause 2.4.3.2 except for sub-clause (c)(vii) for plastic sheeting. (iv) Metal roofing: AS 1562.1. (k) Particleboard structural flooring: AS 1860.2.		

Section B: Structure			
Clause	**Clause Requirements**	**Comment**	**Status**
	(l) Garage doors and other large access doors in openings not more than 3 m in height in external walls of buildings determined as being located in wind region C or D in accordance with AS/NZS 1170.2: AS/NZS 4505. (m) Lift shafts which are not required to have an FRL, must— (i) except as required by (ii), be completely enclosed with non-perforated material between the bottom of the pit and the ceiling of the lift shaft, other than— (A) at landing doors, emergency doors and pit access doors; and (B) low-rise, low-speed constant pressure lifts; and (C) small-sized, low-speed automatic lifts; and (ii) in atrium and observation areas, be protected with non-perforated material not less than 2.5 m in height— (A) above any places on which a person can stand, which are within 800 mm horizontal reach of any vertical moving lift component including ropes and counterweights; and (B) at the lowest level of the atrium area that the lift serves, on all sides except the door opening, for not less than 2.5 m in height, by enclosure with non-perforated material; and (iii) be of non-brittle material; and (iv) where glazing is used— (A) comply with Table B1D4; or (B) not fail the deflection criteria required by S6C11(c)(iii)		
B1D5: Structural software [2019: B1.5]	(1) Structural software used in computer aided design of a building or structure, that uses design criteria based on the Deemed-to-Satisfy Provisions of the BCA, including its	Structural Engineer to certify at CC stage.	CRA – Refer Appendix F

Section B: Structure			
Clause	**Clause Requirements**	**Comment**	**Status**
	referenced documents, for the design of steel or timber trussed roof and floor systems and framed building systems, must comply with the ABCB Protocol for Structural Software. (2) Structural software referred to in (1) can only be used for buildings within the following geometric limits: (a) The distance from ground level to the underside of eaves must not exceed 6 m. (b) The distance from ground level to the highest point of the roof, neglecting chimneys, must not exceed 8.5 m. (c) The building width including roofed verandahs, excluding eaves, must not exceed 16 m. (d) The building length must not exceed five times the building width. (e) The roof pitch must not exceed 35 degrees. (3) The requirements of (1) do not apply to design software for individual frame members such as electronic tables similar to those provided in— (a) AS 1684; or (b) NASH Standard Residential and Low-Rise Steel Framing Part 2.		
B1D6: Construction of buildings in flood hazard areas [2019: B1.6]	(1) A building in a flood hazard area must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas. (2) The requirements of (1) only apply to a Class 2 or 3 building, Class 9a health-care building, Class 9c building or a Class 4 part of a building.	Structural Engineer to certify at CC stage.	CRA – Refer Appendix F
Specification 4	The design requirements for cyclonic areas to be considered by the structural engineer	Structural Engineer to certify at CC stage.	CRA – Refer Appendix F

Section B: Structure			
Clause	**Clause Requirements**	**Comment**	**Status**
Design of Buildings in cyclonic areas			

Section C: Fire resistance

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
Part C1 – Fire Resistance			
Part C1 contains the Objectives, Functional Statements, Performance Requirements and Verification methods applicable to that part.			Noted
Part C2 – Fire Resistance and Stability			
C2D1: Deemed-to-Satisfy Provisions [2019: C1.0]	Informational	Noted	Noted
C2D2: Type of construction required [2019: C1.1]	(1) The minimum Type of fire-resisting construction of a building must be determined in accordance with Table C2D2, except as allowed for— (a) certain Class 2, 3 or 9c buildings, in C2D6; and (b) a Class 4 part of a building located on the top storey, in C2D4(2); and (c) open spectator stands and indoor sports stadiums, in C2D8. (2) Each building element must comply with Specification 5 as applicable.	The building is required to be of Type A construction Refer to Specification 5 at the end of this section for specific requirements. **A Fire Engineered Performance Solution has been proposed to address the following:** + **To permit FRLs of Class 6 portions on Ground Floor to be reduced from FRL180 to FRL120** + **To permit FRLs of Class 7b on Basement Levels to be reduced from FRL240 to FRL120 and specific areas to not require fire separation.**	**PS – Refer to Part 3.3 of Report**

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
		+ **To permit FRLs of Class 7b on Retail Laneway Level to be reduced from FRL240 to FRL120.** + **To permit FRLs of Class 7b / 8 (Loading Dock) on Plaza Level to be reduced from FRL240 to FRL120.**	
C2D3: Calculation of rise in storeys [2019: C1.2]	(1) The rise in storeys is the sum of the greatest number of storeys at any part of the external walls of the building and any storeys within the roof space— (a) above the finished ground next to that part; or (b) if part of the external wall is on the boundary of the allotment, above the natural ground level at the relevant part of the boundary. (2) A storey is not counted if— (a) it is situated at the top of the building and contains only heating, ventilating or lift equipment, water tanks, or similar service units or equipment; or (b) it is situated partly below the finished ground and the underside of the ceiling is not more than 1 m above the average finished level of the ground at the external wall, or if the external wall is more than 12 m long, the average for the 12 m part where the ground is lowest. (3) In a Class 7 or 8 building, a storey that has an average internal height of more than 6 m is counted as— (a) one storey if it is the only storey above the ground; or (b) 2 storeys in any other case. (4) For the purposes of calculating the rise in storeys of a building— (a) a mezzanine is regarded as a storey in that part of the building in which it is situated if its floor area is	The building has a rise in storeys of twenty-one (21).	Noted

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	more than 200 m^2 or more than ⅓ of the floor area of the room, whichever is the lesser; and (b) two or more mezzanines are regarded as a storey in that part of the building in which they are situated if they are at or near the same level and have an aggregate floor area more than 200 m^2 or more than ⅓ of the floor area of the room, whichever is the lesser.		
C2D4: Buildings of multiple classification [2019: C1.3]	(1) In a building of multiple classifications, the Type of construction required for the building is the most fire-resisting Type resulting from the application of Table C2D2 on the basis that the classification applying to the top storey applies to all storeys. (2) In a building containing a Class 4 part on the top storey, for the purpose of (1), the classification applying to the top storey must be— (a) when the Class 4 part occupies the whole of the top storey, the classification applicable to the next highest storey; or (b) when the Class 4 part occupies part of the top storey, the classification applicable to the adjacent part.	Noted	Noted
C2D5: Mixed Types of construction [2019: C1.4]	A building may be of mixed Types of construction where it is separated in accordance with C3D8 and the Type of construction is determined in accordance with C2D2 or C2D4.	This clause is not applicable to the subject building.	NA
C2D6: Two Storey Class 2, 3 or 9c buildings [2019: C1.5]	NA	This clause is not applicable to the subject building.	NA
C2D7: Class 4 Parts of building	NA	This clause is not applicable to the subject building	NA

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
[2019: C1.6]			
C2D8: Open spectator stands and indoor sports stadium [2019: C1.7]	NA	This clause is not applicable to the subject building	NA
C2D9: Lightweight construction [2019: C1.8]	(1) Lightweight construction must comply with Specification 6 if it is used in a wall system— (a) that is required to have an FRL; or (b) for a lift shaft, stair shaft or service shaft or an external wall bounding a public corridor including a non fire-isolated passageway or non fire-isolated ramp, in a spectator stand, sports stadium, cinema or theatre, railway station, bus station or airport terminal. (2) If lightweight construction is used for the fire-resisting covering of a steel column or the like, and if— (a) the covering is not in continuous contact with the column, then the void must be filled solid, to a height of not less than 1.2 m above the floor to prevent indenting; and (b) the column is liable to be damaged from the movement of vehicles, materials or equipment, then the covering must be protected by steel or other suitable material.	This is a design criterion required to be verified by manufacturers details / certification.	CRA – Refer Appendix F
C2D10: Non-combustible building elements [2019: C1.9]	(1) In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: (a) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation. (b) The flooring and floor framing of lift pits.	Specific details or test reports to demonstrate compliance with external walls, external cladding and other attachments have not been provided at this stage. Test reports and supporting data shall be submitted as part of the Construction Certificate application to demonstrate compliance.	CRA – Refer Appendix F

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(c) Non-loadbearing internal walls where they are required to be fire-resisting. (2) A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible construction in— (a) a building required to be of Type A construction; and (b) a building required to be of Type B construction, subject to C3D11, in— (i) a Class 2, 3 or 9 building; and (ii) a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys. (3) A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shaft, must comply with Specification 5. (4) The requirements of (1) and (2) do not apply to the following: (a) Gaskets. (b) Caulking. (c) Sealants. (d) Termite management systems. (e) Glass, including laminated glass, and associated adhesives, including tapes. (f) Thermal breaks associated with— (i) glazing systems; or (ii) external wall systems, where the thermal breaks— (A) are no larger than necessary to achieve thermal objectives; and		

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(B) do not extend beyond one storey; and (C) do not extend beyond one fire compartment. (g) Damp-proof courses. (h) Compressible fillers and backing materials, including those associated with articulation joints, closing gaps not wider than 50 mm. (i) Isolated— (i) construction packers and shims; or (ii) blocking for fixing fixtures; or (iii) fixings, including fixing accessories; or (iv) acoustic mounts. (j) Waterproofing materials applied to the external face, used below ground level and up to 250 mm above ground level. (k) Joint trims and joint reinforcing tape and mesh of a width not greater than 50 mm. (l) Weather sealing materials, applied to gaps not wider than 50 mm, used within and between concrete elements. (m) Wall ties and other masonry components complying with AS 2699 Part 1 and Part 3 as appropriate, and associated with masonry wall construction. (n) Reinforcing bars and associated minor elements that are wholly or predominately encased in concrete or grout. (o) A paint, lacquer or a similar finish or coating. (p) Adhesives, including tapes, associated with stiffeners for cladding systems.		

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(q) Fire-protective materials and components required for the protection of penetrations. (5) The following materials, when entirely composed of itself, are non-combustible and may be used wherever a non-combustible material is required: (a) Concrete. (b) Steel, including metallic coated steel. (c) Masonry, including mortar. (d) Aluminium, including aluminium alloy. (e) Autoclaved aerated concrete, including mortar. (f) Iron. (g) Terracotta. (h) Porcelain. (i) Ceramic. (j) Natural stone. (k) Copper. (l) Zinc. (m) Lead. (n) Bronze. (o) Brass. (6) The following materials may be used wherever a non-combustible material is required: (a) Plasterboard. (b) Perforated gypsum lath with a normal paper finish. (c) Fibrous-plaster sheet. (d) Fibre-reinforced cement sheeting. (e) Pre-finished metal sheeting having a combustible surface finish not exceeding 1 mm thickness and		

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	where the Spread-of-Flame Index of the product is not greater than 0. (f) Sarking-type materials that do not exceed 1 mm in thickness and have a Flammability Index not greater than 5. (g) Bonded laminated materials where— (i) each lamina, including any core, is non-combustible; and (ii) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2 mm; and (iii) the Spread-of-Flame Index and the Smoke-Developed Index of the bonded laminated material as a whole do not exceed 0 and 3 respectively; and (iv) when located externally, are fixed in accordance with C2D15.		
NSW C2D11: Fire hazard properties [2019: C1.10]	(1) The fire hazard properties of the following internal linings, materials and assemblies within a Class 2 to 9 building must comply with Specification 7: (a) Floor linings and floor coverings. (b) Wall linings and ceiling linings. (c) Air-handling ductwork. (d) Lift cars. (e) In Class 9b buildings used as— (i) an entertainment venue, a material used to cover closed back upholstered seats; and (ii) a public hall or the like, a proscenium curtain required by Specification 32.	Specific details with regards to the linings of internal floors, walls and ceilings have not been provided at this stage. The following is to be achieved; <u>Floor Linings</u> A critical radiant flux of 1.2 kW/m2 <u>Wall & Ceiling Linings</u> Fire Isolated Exits- Group 1 Public Corridors; Group 1, 2 or 3 ISU's ; Group 1, 2 or 3	CRA – Refer Appendix F

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(f) Escalators, moving walkways and non-required non fire-isolated stairways or pedestrian ramps subject to Specification 14. (g) Sarking-type materials. (h) Attachments to floors, ceilings, internal walls, common walls, fire walls and to internal linings of external walls. (i) Other materials including insulation materials other than sarking-type materials. (2) Paint or fire-retardant coatings must not be used in order to make a material comply with a required fire hazard property, except in respect of a material referred to in NSW Specification 7, NSW Table S7C7 and to which Notes 4 and 5 are applicable. (3) The requirements of (1) do not apply to a material or assembly if it is— (a) plaster, cement render, concrete, terrazzo, ceramic tile or the like; or (b) a fire-protective covering; or (c) a timber-framed window; or (d) a solid timber handrail or skirting; or (e) a timber-faced door; or (f) an electrical switch, socket-outlet, cover plate or the like; or (g) a material used for— (i) a roof insulating material applied in continuous contact with a substrate; or (ii) an adhesive; or (iii) a damp-proof course, flashing, caulking, sealing, ground moisture barrier, or the like; or	Ceilings: Fire Isolated Exits- Group 1 Public Corridors; Group 1, 2 or 3	

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(h) a paint, varnish, lacquer or similar finish, other than nitro-cellulose lacquer; or (i) a clear or translucent roof light of glass fibre-reinforced polyester if— (i) the roof in which it is installed forms part of a single storey building required to be Type C construction; and (ii) the material is used as part of the roof covering; and (iii) it is not closer than 1.5 m from another roof light of the same type; and (iv) each roof light is not more than 14 m^2 in area; and (v) the area of the roof lights per 70 m^2 of roof surface is not more than 14 m^2; or (j) a face plate or neck adaptor of supply and return air outlets of an air handling system; or (k) a face plate or diffuser plate of light fitting and emergency exit signs and associated electrical wiring and electrical components; or (l) a joinery unit, cupboard, shelving, or the like; or (m) an attached non-building fixture and fitting such as— (i) a curtain, blind, or similar decor, other than— (A) a proscenium curtain required by Specification 32; or (B) in a Class 9b building used as an entertainment venue, a material regulated under NSW Table S7C7; and (ii) a whiteboard, window treatment or the like; or		

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(n) timber treads, risers, landings and associated supporting framework installed in accordance with D3D30 where the Spread-of-Flame Index and the Smoke-Developed Index of the timber does not exceed 9 and 8 respectively; or (o) any other material that does not significantly increase the hazards of fire.		
C2D12: Performance of external walls in fire [2019: C1.11]	Concrete external walls that could collapse as complete panels (e.g. tilt-up and pre-cast concrete), in a building having a rise in storeys of not more than 2, must comply with Specification 8.	This clause is not applicable to the subject building	NA
C2D13: Fire-protected timber: Concession [2019: C1.13]	NA	This clause is not applicable to the subject building	NA
C2D14: Ancillary elements [2019: C1.14]	An ancillary element must not be fixed, installed, attached to or supported by the concealed internal parts or external face of an external wall that is required to be non-combustible unless it is one of the following: (a) An ancillary element that is non-combustible. (b) A gutter, downpipe or other plumbing fixture or fitting. (c) A flashing. (d) A grate, grille or similar cover not more than 2 m^2 in area associated with a building service. (e) An electrical switch, socket-outlet, cover plate or the like. (f) A light fitting. (g) A required sign. (h) A sign other than one provided under (a) or (g) that— (i) achieves a group number of 1 or 2; and	Compliance shall be achieved with the requirements of this Clause. Insufficient detail has been provided to enable a detailed assessment of ancillary building elements; however, compliance can be achieved. Test reports and supporting data shall be submitted as part of the Construction Certificate application to demonstrate compliance.	CRA – Refer Appendix F

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) does not extend beyond one storey; and (iii) does not extend beyond one fire compartment; and (iv) is separated vertically from other signs permitted under (h) by at least 2 storeys. (i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that— (i) meets the relevant requirements of Table S7C7 as for an internal element; and (ii) serves a storey— (A) at ground level; or (B) immediately above a storey at ground level; and (iii) does not serve an exit, where it would render the exit unusable in a fire. (j) A part of a security, intercom or announcement system. (k) Wiring. (l) Waterproofing material installed in accordance with AS 4654.2 and applied to an adjacent floor surface, including vertical upturn, or a roof surface. (m) Collars, sleeves and insulation associated with service installations. (n) Screens applied to vents, weepholes and gaps complying with AS 3959. (o) Wiper and brush seals associated with doors, windows or other openings. (p) A gasket, caulking, sealant or adhesive directly associated with (a) to (o).		
C2D15: Fixing of Bonded Laminated Cladding Panels	(1) In a building required to be of Type A or B construction, externally located bonded laminated cladding panels must	At this stage details regarding the fixing of any bonded laminated cladding panels have not been provided.	CRA – Refer Appendix F

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
[New for 2022]	have all layers of cladding mechanically supported or restrained to the supporting frame. (2) An externally located bonded laminated cladding panel need not comply with (1) if it is one of the following: (a) A laminated glass system. (b) Layered plasterboard product. (c) Perforated gypsum lath with a normal paper finish. (d) Fibrous-plaster sheet. (e) Fibre-reinforced cement sheeting. (f) A component of a garage door.		
Part C3 – Compartment and Separation			
C3D1: Deemed-to-Satisfy Provisions [2019: C2.0]	Informational	Noted	Noted
C3D2: Application of Part [2019: C2.1]	(1) C3D3, C3D4 and C3D5 do not apply to a carpark provided with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17, an open-deck carpark or an open spectator stand. (2) C3D13(1)€ does not apply to a Class 8 electricity network substation.	Noted	Noted
C3D3: General floor area and volume limitations [2019: C2.2]	(1) The size of any fire compartment or atrium in a Class 5, 6, 7, 8 or 9 building must not exceed the relevant maximum floor area nor the relevant maximum volume set out in Table C3D3 and C3D6 except as permitted in C3D4. (2) A part of a building which contains only heating, ventilating, or lift equipment, water tanks, or similar service units is not counted in the floor area or volume of a fire	The general floor area and volume limitations has been met within the subject development.	CRA – Refer Appendix F

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	compartment or atrium if it is situated at the top of the building. (3) In a building containing an atrium, the part of the atrium well bounded by the perimeter of the openings in the floors and extending from the level of the first floor above the atrium floor to the roof covering is not counted in the volume of the atrium for the purposes of this clause.		
C3D4: Large isolated buildings [2019: C2.3]	NA	This clause is not applicable to the subject building	NA
C3D5: Requirements for open spaces and vehicular access [2019: C2.4]	NA	This clause is not applicable to the subject building	NA
NSW C3D6: Class 9 Buildings [2019: C2.5]	(1) A Class 9a health-care building must comply with the following: (a) patient care areas must be divided into fire compartments not exceeding 2000 m^2. (b) A fire compartment must be separated from the remainder of the building by fire walls and— (i) in Type A construction—floors and roof or ceiling as required in Specification 5; and (ii) in Type B construction—floors with an FRL of not less than 120/120/120 and with the openings in external walls bounding patient care areas being vertically separated in accordance with the requirements of C3D7 as if the building were of Type A construction. (c) Ward areas—	This clause is not applicable to the subject building. It should be noted the communal areas within the building are ancillary to the Class 2 residents and only the tenants shall have access to these areas. Should any of these areas be made available to the public, this clause may require a reassessment.	NA

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(i) where the floor area exceeds 1000 m^2, must be divided into floor areas not more than 1000 m^2 by walls with an FRL of not less than 60/60/60; and (ii) where the floor area exceeds 500 m^2, must be divided into floor areas not more than 500 m^2 by smoke-proof walls complying with Specification 11; and (iii) where the floor area is not more than 500 m^2, must be separated from the remainder of the patient care area by smoke-proof walls complying with Specification 11; and (iv) where division of ward areas by fire-resisting walls under (a) or (c)(i) is not required, any smoke-proof wall required under (c)(ii) or (iii) must have an FRL of not less than 60/60/60. (d) Treatment areas— (i) where the floor area exceeds 1000 m^2, must be divided into floor areas not more than 1000 m^2 by smoke-proof walls complying with Specification 11; and (ii) where the floor area is not more than 1000 m^2, must be separated from the remainder of the patient care area by smoke-proof walls complying with Specification 11. (e) Ancillary use areas located within a patient care area and containing equipment or materials that are a high potential fire hazard, must be separated from the remainder of the patient care area by walls with an FRL of not less than 60/60/60. (f) The ancillary use areas referred to in (e) include, but are not limited to, the following:		

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Clause	**Clause Requirements**	**Comment**	**Status**
	(i) A kitchen and related food preparation areas having a combined floor area of more than 30 m^2. (ii) A room containing a hyperbaric facility (pressure chamber). (iii) A room used predominantly for the storage of medical records having a floor area of more than 10 m^2. (iv) A laundry, where items of equipment are of the type that are potential fire sources (e.g. gas fire dryers). (g) A wall required by (e) to separate ancillary use areas from the remainder of the building must extend to the underside of— (i) the floor above; or (ii) a non-combustible roof covering; or (iii) a ceiling having a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes. (h) Openings in walls required by (c) and (e) to have an FRL must be protected as follows: (i) Doorways—self-closing or automatic closing –/60/30 fire doors. (ii) Windows—automatic or permanently fixed closed –/60/– fire windows or –/60/– automatic fire shutters. (iii) Other openings—construction having an FRL not less than –/60/–. (2) In a building containing a Class 9b early childhood centre— (a) unless the Class 9b early childhood centre is the only use in the building, it must be separated from the		

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	remainder of the building by walls and/or floors with an FRL not less than that required for a fire wall; and (b) each storey within the Class 9b early childhood centre must contain not less than 2 fire compartments. (3) A Class 9c building must comply with the following: (a) A building must be divided into areas not more than 500 m^2 by smoke proof walls complying with Specification 11. (b) A fire compartment must be separated from the remainder of the building by fire walls and notwithstanding C3D8 and Specification 5, floors with an FRL of not less than 60/60/60. (c) Except for walls provided in accordance with (3)(a) and (b), non-loadbearing internal walls, and if a building is of Type C construction — all internal walls, between and bounding sole-occupancy units and bounding a public corridor in a resident use area must: (i) be lined on each side with standard grade plasterboard not less than 13 mm thick or a material with at least an equivalent level of fire protection; and (ii) if provided with cavity insulation, contain only non-combustible insulation; and (iii) extend to the underside of— (A) the floor next above; or (B) a ceiling lined with standard grade plasterboard not less than 13 mm thick or an equivalent non-combustible material; or (C) a non-combustible roof covering; and (iv) not incorporate any penetrations above door head height unless the penetrations are		

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	adequately stopped to prevent the free passage of smoke; and (v) be smoke sealed with intumescent putty or other suitable material at any construction joint, space or the like between the top of the wall and the floor, ceiling or roof. (d) Loadbearing internal walls must comply with the requirements of Specification 5 and (c)(ii), (iii), (iv) and (v) above. (e) Ancillary use areas containing equipment or materials that are a high potential fire hazard, must be separated from the sole-occupancy units by smoke proof walls complying with Specification 11. (f) The ancillary use areas referred to in (e) include, but are not limited to, the following: (i) A kitchen and related food preparation areas having a combined floor area of more than 30 m^2. (ii) A laundry, where items of equipment are of the type that are potential fire sources (e.g. gas fire dryers). (iii) Storage rooms greater than 10 m^2 used predominantly for the storage of administrative records. (g) Openings in fire walls must be protected as follows: (i) Doorways — self-closing or automatic closing –/60/30 fire doors. (ii) Windows — automatic or permanently fixed closed –/60/– fire windows or –/60/– automatic fire shutters. (iii) Other openings — construction having an FRL not less than –/60/–.		

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C3D7: Vertical separation of openings in external walls [2019: C2.6]	Spandrels are not required to buildings that are provided with an AS 2118.1:2017 or AS 2118.4:2012 sprinkler system installed throughout.	The proposed building is required to have a sprinkler system; therefore, spandrels are not required.	Complies
C3D8: Separation by fire walls [2019: C2.7]	(1) Construction — A fire wall must be constructed in accordance with the following: (a) The fire wall has the relevant FRL prescribed by Specification 5 for each of the adjoining parts, and if these are different, the greater FRL, except where S5C19(3)(c)(i), S5C22(3)(c)(i) and S5C25(3)(c)(i) permit a lower FRL on the carpark side. (b) Any openings in a fire wall must not reduce the FRL required by Specification 5 for the fire wall, except where permitted by the Deemed-to-Satisfy Provisions of Part C4. (c) Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not pass through or cross the fire wall unless the required fire-resisting performance of the fire wall is maintained. (2) Separation of buildings — A part of a building separated from the remainder of the building by a fire wall may be treated as a separate building for the purposes of the Deemed-to-Satisfy Provisions of Sections C, D and E if it is constructed in accordance with (1) and the following: (a) The fire wall extends through all storeys and spaces in the nature of storeys that are common to that part and any adjoining part of the building. (b) The fire wall is carried through to the underside of the roof covering.	The structural engineer is to provide construction drawings including design certification making specific reference to Specification 5 and any relevant fire engineering performance solution report. The walls must be constructed in accordance with this Clause and continue to the underside of the slab above.	CRA – Refer Appendix F

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	(c) Where the roof of one of the adjoining parts is lower than the roof of the other part, the fire wall extends to the underside of— (i) the covering of the higher roof, or not less than 6 m above the covering of the lower roof; or (ii) the lower roof if it has an FRL not less than that of the fire wall and no openings closer than 3 m to any wall above the lower roof; or (iii) the lower roof if its covering is non-combustible and the lower part has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. (3) Separation of fire compartments — A part of a building separated from the remainder of the building by a fire wall may be treated as a separate fire compartment if it is constructed in accordance with (a) and the fire wall extends to the underside of— (a) a floor having an FRL required for a fire wall; or (b) the roof covering.		
C3D9: Separation of classifications in the same storey [2019: C2.8]	(1) If a building has parts of different classifications located alongside one another in the same storey— (a) each building element in that storey must have the higher FRL prescribed in Specification 5 for that element for the classifications concerned; or (b) the parts must be separated in that storey by a fire wall. (2) A fire wall required by (1)(b) must have the FRL prescribed in accordance with Specification 5 as applicable for that element for the Type of construction and the classifications concerned.	Separation of classifications in the same storey is required to be provided in accordance with this clause. The structural engineer is to provide construction drawings including design certification making specific reference to Specification 5 and any relevant fire engineering performance solution report. The walls must be constructed in accordance with this Clause and continue to the underside of the slab above.	CRA – Refer Appendix F

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	(3) For the purposes of (2), the FRL in Specification 5 must be either— (a) the higher FRL prescribed in Table S5C11d or S5C21d; or (b) the FRL prescribed in Table S5C24c. (4) For the purposes of (1), where one part is a carpark complying with S5C19, S5C22 or S5C25, the parts may be separated by a fire wall complying with S5C19(3)(c), S5C22(3)(c) or S5C25(3)(c) as appropriate.		
C3D10: Separation of classifications in different storeys [2019: C2.9]	If parts of different classification are situated one above the other in adjoining storeys they must be separated as follows: (a) Type A construction — The floor between the adjoining parts must have an FRL of not less than that prescribed in Specification 5 for the classification of the lower storey. (b) Type B or C construction — If one of the adjoining parts is of Class 2, 3 or 4, the floor separating the part from the storey below must— (i) be a floor/ceiling system incorporating a ceiling which has a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or (ii) have an FRL of at least 30/30/30; or (iii) have a fire-protective covering on the underside of the floor, including beams incorporated in it, if the floor is combustible or of metal.	Separation of classifications in the different storey is required to be provided in accordance with this clause. The structural engineer is to provide construction drawings including design certification making specific reference to Specification 5 and any relevant fire engineering performance solution report. The walls must be constructed in accordance with this Clause and continue to the underside of the slab above.	CRA – Refer Appendix F
C3D11: Separation of lift shafts [2019: C2.10]	(1) Any lift connecting more than 2 storeys, or more than 3 storeys if the building is sprinklered, (other than lifts which	Concrete wall has been provided to separate the lift shafts which can readily comply with this clause.	CRA – Refer Appendix F

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	are wholly within an atrium) must be separated from the remainder of the building by enclosure in a shaft in which— (a) in a building required to be of Type A construction — the walls have the relevant FRL prescribed by Specification 5; and (b) in a building required to be of Type B construction — the walls— (i) if loadbearing, have the relevant FRL prescribed by Table S5C21e; or (ii) if non-loadbearing, be of non-combustible construction. (2) Any lift in a patient care area in a Class 9a health-care building or a resident use area in Class 9c building must be separated from the remainder of the building by a shaft having an FRL of not less than— (a) in a building of Type A or B construction — 120/120/120; or (b) in a building of Type C construction — 60/60/60. (3) An emergency lift must be contained within a fire-resisting shaft having an FRL of not less than 120/120/120. (4) Openings for lift landing doors and services must be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4.	Structural Engineer is to provide design certification making specific reference to Specification 5 and any relevant fire engineering performance solution report.	
C3D12: Stairways and lifts in one shaft [2019: C2.11]	A stairway and lift must not be in the same shaft if either the stairway or the lift is required to be in a fire-resisting shaft.	The stairways and lifts are not located within the same shaft and therefore compliance is readily achievable.	Complies
C3D13: Separation of equipment [2019: C2.12]	(1) Equipment other than that described in (2) and (3) must be separated from the remainder of the building with construction complying with (4), if that equipment comprises—	Any services areas or rooms which incorporate any services prescribed by this clause shall be separated from the remainder of the building by FRL 120/120/120 FRL construction with self-closing FRL -/120/30 fire doors. This	CRA – Refer Appendix F

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	(a) lift motors and lift control panels; or (b) emergency generators used to sustain emergency equipment operating in the emergency mode; or (c) central smoke control plant; or (d) boilers; or (e) 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. (2) Equipment need not be separated in accordance with (1) if the equipment comprises— (a) smoke control exhaust fans located in the air stream which are constructed for high temperature operation in accordance with Specification 21; or (b) stair pressurising equipment installed in compliance with the relevant provisions of AS 1668.1; or (c) a lift installation without a machine-room; or (d) equipment otherwise adequately separated from the remainder of the building. (3) Separation of on-site fire pumps must comply with the requirements of AS 2419.1. (4) Separating construction must have— (a) except as provided by (b)— (i) an FRL as required by Specification 5, but not less than 120/120/120; and (ii) any doorway protected with a self-closing fire door having an FRL of not less than –/120/30; or (b) when separating a lift shaft and lift motor room, an FRL not less than 120/–/–.	shall be determined, confirmed and certified by the relevant services engineers and structural engineer as a component of the Construction Certificate application.	
C3D14: Electricity supply system	(1) An electricity substation located within a building must—	The main switch room will need to be separated from the remainder of the building in accordance with this Clause.	CRA – Refer Appendix F

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[2019: C2.13]	(a) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and (b) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30. (2) A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must— (a) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and (b) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30. (3) Subject to (4), electrical conductors must— (a) have a classification in accordance with AS/NZS 3013 of not less than— (i) if located in a position that could be subject to damage by motor vehicles — WS53W; or (ii) otherwise — WS52W; or (b) be enclosed or otherwise protected by construction having an FRL of not less than 120/120/120. (4) The requirements of (3) only apply to electrical conductors located within a building that supply— (a) a substation located within the building which supplies a main switchboard covered by (2); or (b) a main switchboard covered by (2). (5) Where emergency equipment is required in a building, all switchboards in the electrical installation, which sustain the electricity supply to the emergency equipment, must be constructed so that emergency equipment switchgear is		

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	separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear. (6) For the purposes of (5), emergency equipment includes but is not limited to the following: (a) Fire hydrant booster pumps. (b) Pumps for automatic sprinkler systems, water spray, chemical fluid suppression systems or the like. (c) Pumps for fire hose reels where such pumps and fire hose reels form the sole means of fire protection in the building. (d) Air handling systems designed to exhaust and control the spread of fire and smoke. (e) Emergency lifts. (f) Control and indicating equipment. (g) Emergency warning and intercom systems.		
C3D15: Public corridors in Class 2 and 3 Buildings [2019: C2.14]	In a Class 2 or 3 building, a public corridor, if more than 40 m in length, must be divided at intervals of not more than 40 m with smoke-proof walls complying with S11C2.	**The length of the public corridors within the William Street building exceeds 40m in the following locations without smoke proof walls. A Fire Engineered Performance Solution is required to address the non-compliance:** + **Mezzanine Level to Level 03, corridor length is 50m in lieu of 40m** + **Level 04 to 07, corridor length is 45m in lieu of 40m** The public corridor in the William St building on the Retail Laneway – Dowling St Level is separated via a wall. It is required that the wall and door shall achieve smoke-proof as per S11C2 or otherwise be addressed via Fire Engineered	**PS – Refer to Part 3.3 of Report**

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		Performance Solution. Details of construction can be provided at Construction Certificate Stage.	
Part C4 – Protection of Openings			
C4D1: Deemed-to-Satisfy Provisions [2019: C3.0]	Informational	Noted	Noted
C4D2: Application of Part [2019: C3.1]	(1) The Deemed-to-Satisfy Provisions of this Part do not apply to the following: (a) Control joints, weep holes and the like in external walls of masonry construction and joints between panels in external walls of pre-cast concrete panel construction if, in all cases they are not larger than necessary for the purpose. (b) Non-combustible ventilators for subfloor or cavity ventilation, if each does not exceed 45 000 mm^2 in face area and is spaced not less than 2 m from any other ventilator in the same wall. (c) Openings in the vertical plane formed between building elements at the construction edge or perimeter of a balcony or verandah, colonnade, terrace, or the like. (d) In a carpark floor other than a floor that separates a part not used as a carpark, and subject to (e), the following openings in a carpark floor: (i) Service penetrations. (ii) Openings formed by a vehicle ramp. (e) The requirements of (d) only apply where the connected carpark levels comply as a single fire compartment for the purposes of all other requirements	For noting.	Noted

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	of the Deemed-to-Satisfy Provisions of Sections C, D and E. (2) For the purposes of the Deemed-to-Satisfy Provisions of this Part, openings in building elements required to be fire-resisting include doorways, windows (including any associated fanlight), infill panels and fixed or openable glazed areas that do not have the required FRL. (3)For the purposes of the Deemed-to-Satisfy Provisions of this Part, openings, other than those covered under (1)(c), between building elements such as columns, beams and the like, in the plane formed at the construction edge or perimeter of the building, are deemed to be openings in an external wall.		
C4D3: Protection of openings in external walls [2019: C3.2]	(1) Subject to (2), openings in an external wall that is required to have an FRL must be protected in accordance with C4D5, and if wall-wetting sprinklers are used, they must be located externally. (2) The requirements of (1) only apply if the distance between the opening and the fire-source feature to which it is exposed is less than— (a) 3 m from a side or rear boundary of the allotment; or (b) 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or (c) 6 m from another building on the allotment that is not Class 10. (3) Openings required to be protected under (1), must not occupy more than 1/3 of the area of the external wall of the storey in which they are located unless they are in a Class 9b building used as an open spectator stand.	The building is setback more than 3m from any fire-source features and therefore the external wall is not required to be fire rated. As a result, there are no openings that are required to be protected in accordance with this clause. This clause is not applicable to the subject building.	CRA – Refer Appendix F

<table>
<tr><th colspan="4">Section C: Fire Resistance</th></tr>
<tr><th>Clause</th><th>Clause Requirements</th><th>Comment</th><th>Status</th></tr>
<tr>
<td>C4D4: Separation of external walls and associated openings in different fire compartments
[2019: C3.3]</td>
<td>The distance between parts of external walls and any openings within them in different fire compartments separated by a fire wall must not be less than that set out in Table C4D4, unless—
(a) those parts of each wall have an FRL not less than 60/60/60; and
(b) any openings protected in accordance with C4D5.
Table C4D4 DISTANCE BETWEEN EXTERNAL WALLS AND ASSOCIATED OPENINGS IN DIFFERENT FIRE COMPARTMENTS
<table>
<tr><th>Angle between walls</th><th>Min. Distance</th></tr>
<tr><td>0° (walls opposite)</td><td>6 m</td></tr>
<tr><td>more than 0° to 45°</td><td>5 m</td></tr>
<tr><td>more than 45° to 90°</td><td>4 m</td></tr>
<tr><td>more than 90° to 135°</td><td>3 m</td></tr>
<tr><td>more than 135° to less than 180°</td><td>2 m</td></tr>
<tr><td>180° or more</td><td>Nil</td></tr>
</table>
</td>
<td>There are no exposed openings in different fire compartments and therefore, this clause is not applicable.</td>
<td>NA</td>
</tr>
<tr>
<td>C4D5: Acceptable methods of protection
[2019: C3.4]</td>
<td>(1) Where protection is required, doorways, windows and other openings must be protected as follows:
(a) Doorways—
(i) internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or
(ii) –/60/30 fire doors that are self-closing or automatic closing.
(b) Windows—
(i) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic</td>
<td>The building is setback more than 3m from any fire-source features and therefore the external wall is not required to be fire rated. As a result, there are no openings that are required to be protected in accordance with this clause. This clause is not applicable to the subject building.</td>
<td>CRA – Refer Appendix F</td>
</tr>
</table>

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	closing or permanently fixed in the closed position; or (ii) –/60/– fire windows that are automatic closing or permanently fixed in the closed position; or (iii) –/60/– automatic closing fire shutters. (c) Other openings— (i) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or (ii) construction having an FRL not less than –/60/- (2) Fire doors, fire windows and fire shutters must comply with Specification 12.		
C4D6: Doorways in fire walls [2019: C3.5]	(1) The aggregate width of openings for doorways in a fire wall, which are not part of a horizontal exit, must not exceed ½ of the length of the fire wall, and each doorway must be protected by— (a) 2 fire doors or fire shutters, one on each side of the doorway, each of which has an FRL of not less than ½ that required by Specification 5 for the fire wall except that each door or shutter must have an insulation level of at least 30; or (b) a fire door on one side and a fire shutter on the other side of the doorway, each of which complies with (a); or (c) a single fire door or fire shutter which has an FRL of not less than that required by Specification 5 for the fire wall except that each door or shutter must have an insulation level of at least 30. (2) A fire door or fire shutter required by (1)(a), (b) or (c) must be self-closing, or automatic closing in accordance with (3) and (4).	The doorways in fire walls are required to be provided with a fire door in accordance with this clause.	CRA – Refer Appendix F

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	(3) The automatic closing operation required by (2) must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located on each side of the fire wall not more than 1.5 m horizontal distance from the opening. (4) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification 17, is installed in the building, activation of the system in either fire compartment separated by the fire wall must also initiate the automatic closing operation.		
C4D7: Sliding fire doors [2019: C3.6]	NA	No sliding fire doors are not proposed and therefore, this clause is not applicable.	NA
C4D8: Protection of doorways in horizontal exits [2019: C3.7]	NA	Horizontal exits are not proposed and therefore, this clause is not applicable.	NA
C4D9: Openings in fire-isolated exits [2019: C3.8]	(1) Doorways that open to fire-isolated stairways, fire-isolated passageways or fire-isolated ramps, and are not doorways opening to a road or open space, must be protected by –/60/30 fire doors that are self-closing, or automatic closing in accordance with (2) and (3). (2) The automatic-closing operation required by (1) must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located not more than 1.5 m horizontal distance from the approach side of the doorway.	The openings in fire-isolated exits are required to be provided in accordance with this clause. **Where an access hatch is provided from the fire-stair to the roof for maintenance access, a Fire Engineered Performance Solution is required to address where the access hatch is not provided with an automatic closing operation as per C4D9 (2).**	**PS – Refer to Part 3.3 of Report**

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	(3) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification 17, is installed in the building, activation of the system must also initiate the automatic-closing operation. (4) A window in an external wall of a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp must be protected in accordance with C4D5 if it is within 6 m of, and exposed to, a window or other opening in a wall of the same building, other than in the same fire-isolated enclosure.		
C4D10: Service penetrations in fire-isolated exits [2019: C3.9]	Fire-isolated exits must not be penetrated by any services other than— (a) electrical wiring permitted by D3D8(6) to be installed within the exit; or (b) ducting associated with a pressurisation system if it— (i) is constructed of material having an FRL of not less than –/120/60 where it passes through any other part of the building; and (ii) does not open into any other part of the building; or (c) for fire services, water supply and test drain pipes.	Compliance is readily achievable with the requirements of this clause. The services consultants shall ensure that no non-required services penetrate the fire-isolated exits in the building.	CRA – Refer Appendix F
C4D11: Openings in fire-isolated lift shafts [2019: C3.10]	(1) Doorways — If a lift shaft is required to be fire-isolated, an entrance doorway to that shaft must be protected by –/60/– fire doors that— (a) comply with AS 1735.11; and (b) are set to remain closed except when discharging or receiving passengers, goods or vehicles. (2) Lift indicator panels — A lift call panel, indicator panel or other panel in the wall of a fire-isolated lift shaft must	Compliance is readily achievable with the requirements of this clause for the lift landing doors. Certification shall be provided by the lift supplier with the Construction Certificate application.	CRA – Refer Appendix F

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	be backed by construction having an FRL of not less than –/60/60 if it exceeds 35 000 mm^2 in area.		
NSW C4D12: Bounding construction: Class 2 and 3 buildings and Class 4 parts [2019: C3.11]	(1) A doorway in a Class 2 or 3 building must be protected if it provides access from a sole-occupancy unit to— (a) a public corridor, public lobby, or the like; or (b) a room not within a sole-occupancy unit; or (c) the landing of an internal non fire-isolated stairway that serves as a required exit; or (d) another sole-occupancy unit. (2) A doorway in a Class 2 or 3 building must be protected if it provides access from a room not within a sole-occupancy unit to— (a) a public corridor, public lobby, or the like; or (b) the landing of an internal non fire-isolated stairway that serves as a required exit. (3) A doorway in a Class 4 part of a building must be protected if it provides access to any other internal part of the building. (4) Except as provided for in NSW C4D12(5), protection for a doorway required under (1), (2) or (3) must be at least— (a) in a building of Type A construction — a self-closing –/60/30 fire door; and (b) in a building of Type B or C construction — a self-closing, tight fitting, solid core door not less than 35 mm thick. (5) In a Class 3 building used as a residential care building protected with a sprinkler system complying with Specification 17, protection for a doorway must be at least a tight fitting solid core door not less than 35 mm thick that is—	Bounding construction shall apply to the Class 2 portions of the building.	CRA – Refer Appendix F

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	(a) self-closing; or (b) fitted with a free-arm action closing device which closes the door or causes the door to remain closed (without preventing manual re-opening), upon the detection of smoke caused by a smoke detector located within the room. (6) Other openings in internal walls which are required to have an FRL with respect to integrity and insulation must not reduce the fire-resisting performance of the wall. (7) A door required by (4) or (5) may be automatic-closing in accordance with the following: (a) The automatic-closing operation must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located not more than 1.5 m horizontal distance from the approach side of the doorway. (b) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification 17, is installed in the building, activation of the system must also initiate the automatic-closing operation. (8) The requirements of (9) apply in a Class 2 or 3 building where a path of travel to an exit— (a) does not provide a person seeking egress with a choice of travel in different directions to alternative exits; and (b) is along an open balcony, landing or the like; and (c) passes an external wall of— (i) another sole-occupancy unit; or		

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Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) a room not within a sole-occupancy unit. (9) The external wall mentioned in (8)(c) must— (a) be constructed of concrete or masonry, or be lined internally with a fire-protective covering; and (b) have any doorway fitted with a self-closing, tight-fitting solid core door not less than 35 mm thick; and (c) have any windows or other openings— (i) protected internally in accordance with C4D5; or (ii) located at least 1.5 m above the floor of the balcony, landing or the like. (10) In a Class 9b building used as an entertainment venue, openings in construction required to separate one space from another must be protected in accordance with C4D5.		
C4D13: Openings in floors and ceilings for services [2019: C3.12]	(1) Where a service passes through— (a) a floor that is required to have an FRL with respect to integrity and insulation; or (b) a ceiling required to have a resistance to the incipient spread of fire, (c) the service must be installed in accordance with (2). (2) A service must be protected— (a) in a building of Type A construction, by a shaft complying with Specification 5; or (b) in a building of Type B or C construction, by a shaft that will not reduce the fire performance of the building elements it penetrates; or (c) in accordance with C4D15. (3) Where a service passes through a floor which is required to be protected by a fire-protective covering, the	Compliance is readily achievable in relation to the protection of openings and penetrations in/through fire-resisting building elements. The fire protection method shall be strictly in accordance with this clause and AS1530.4-2014.	CRA – Refer Appendix F

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	penetration must not reduce the fire performance of the covering.		
C4D14: Openings in shafts [2019: C3.13]	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— (a) if it is in 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 (b) a self-closing –/60/30 fire door or hopper; or (c) an access panel having an FRL of not less than –/60/30; or (d) if the shaft is a garbage shaft — a door or hopper of non-combustible construction.	Compliance is readily achievable in relation to the protection of openings and penetrations in/through fire-resisting building elements. The fire protection method shall be strictly in accordance with this clause and AS1530.4-2014.	CRA – Refer Appendix F
C4D15: Openings for service installations [2019: C3.15]	(1) The requirements of (2) apply where an electrical, electronic, plumbing, mechanical ventilation, air-conditioning or other service penetrates a building element (other than an external wall or roof) that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire. (2) An installation mentioned in (1) must comply with any one of the following: (a) Tested systems — the following applies: (i) The service, building element and any protection method at the penetration— (A) are identical with a prototype assembly of the service, building element and protection method which has been tested in accordance with AS 4072.1 and AS 1530.4 and has achieved the required FRL or resistance to the incipient spread of fire; or	Compliance is readily achievable in relation to the protection of openings and penetrations in/through fire-resisting building elements. The fire protection method shall be strictly in accordance with this clause and AS1530.4-2014.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	(B) differ from a prototype assembly of the service, building element and protection method in accordance with Section 4 of AS 4072.1. (ii) It complies with (i) except for the insulation criteria relating to the service if— (A) the service is a pipe system comprised entirely of metal (excluding pipe seals or the like); and (B) any combustible building element is not located within 100 mm of the service for a distance of 2 m from the penetration; and (C) combustible material is not able to be located within 100 mm of the service for a distance of 2 m from the penetration; and (D) it is not located in a required exit. (iii) The determination of the required FRL must be confirmed in a report from an Accredited Testing Laboratory in accordance with Specifications 1 and 2. (b) Ventilation and air-conditioning — in the case of ventilating or air-conditioning ducts or equipment, the installation is in accordance with AS 1668.1. (c) Compliance with Specification 13 — the following applies: (i) The service is a pipe system comprised entirely of metal (excluding pipe seals or the like) and is installed in accordance with Specification 13 and it— (A) penetrates a wall, floor or ceiling, but not a ceiling required to have a resistance to the incipient spread of fire; and		

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(B) connects not more than 2 fire compartments in addition to any fire-resisting service shafts; and (C) does not contain a flammable or combustible liquid or gas. (ii) The service is sanitary plumbing installed in accordance with Specification 13 and it— (A) is of metal or UPVC pipe; and (B) penetrates the floors of a Class 5, 6, 7, 8 or 9b building; and (C) is in a sanitary compartment separated from other parts of the building by walls with the FRL required by Specification 5 for a stair shaft in the building and a self-closing –/60/30 fire door. (iii) The service is a wire or cable, or a cluster of wires or cables installed in accordance with Specification 13 and it— (A) penetrates a wall, floor or ceiling, but not a ceiling required to have a resistance to the incipient spread of fire; and (B) connects not more than 2 fire compartments in addition to any fire-resisting service shafts. (iv) The service is an electrical switch, outlet, or the like, and it is installed in accordance with Specification 13.		
C4D16: Construction joints [2019: C3.16]	(1) Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner—	Construction joints and the like in fire rated building elements must be provided in accordance with this clause.	CRA – Refer Appendix F

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(a) identical with a prototype tested in accordance with AS 4072.1 and AS 1530.4 to achieve the required FRL; or (b) that differs from a prototype in accordance with Section 4 of AS 4072.1 and achieves the required FRL. (2) The determination of the required FRL must be confirmed in a report from an Accredited Testing Laboratory in accordance with Specifications 1 and 2. (3) The requirements of (1) do not apply where joints, spaces and the like between fire-protected timber elements are provided with cavity barriers in accordance with Specification 9..		
C4D17: Columns protected with lightweight construction to achieve an FRL [2019: C3.17]	A column protected by lightweight construction to achieve an FRL which passes through a building element that is required to have an FRL or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly of the construction which has achieved the required FRL or resistance to the incipient spread of fire.	Where columns are to be protected with lightweight construction it must maintain the FRL required in accordance with this clause	CRA – Refer Appendix F
Specification 5 – Fire-Resisting Construction			
S5C1: Scope [2019: Spec C1.1: 1]	This Specification contains requirements for the fire-resisting construction of building elements.	Noted	Noted
S5C2: Exposure to fire-source features [2019: Spec C1.1: 2.1]	(1) A part of a building element is exposed to a fire-source feature if any of the horizontal straight lines between that part and the fire-source feature, or vertical projection of the feature, is not obstructed by another part of the building that— (a) has an FRL of not less than 30/–/–; and (b) is neither transparent nor translucent.	For noting.	Noted

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(2) A part of a building element is not exposed to a fire-source feature if the fire-source feature is— (a) an external wall of another building that stands on the allotment and the part concerned is more than 15 m above the highest part of that external wall; or (b) a side or rear boundary of the allotment and the part concerned is below the level of the finished ground at every relevant part of the boundary concerned. (3) If various distances apply for different parts of a building element— (a) the entire element must have the FRL applicable to that part having the least distance between itself and the relevant fire-source feature; or (b) each part of the element must have the FRL applicable according to its individual distance from the relevant fire-source feature. (4) The requirements of (3) do not override or permit any exemption from S5C3.		
S5C3: Fire protection for a support of another part [2019: Spec C1.1: 2.2]	(1) Where a part of a building required to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part, subject to (2), must— (a) have an FRL not less than that required by other provisions of this Specification; and (b) if located within the same fire compartment as the part it supports have an FRL in respect of structural adequacy the greater of that required— (i) for the supporting part itself; and (ii) for the part it supports; and (c) be non-combustible—	The structural engineer shall ensure compliance with the requirements of this clause in their design of the load paths of structural and fire-resisting building elements and certify compliance with the requirements of this Clause with the Construction Certificate application.	CRA – Refer Appendix F

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(i) if required by other provisions of this Specification; or (ii) if the part it supports is required to be non-combustible. (2) The following building elements need not comply with (1)(b) and (1)(c)(ii): (a) An element providing lateral support to an external wall complying with S5C24(1)(b) or C2D12. (b) An element providing support within a carpark and complying with S5C19, S5C22 or S5C25. (c) A roof providing lateral support in a building— (i) of Type A construction if it complies with S5C15(a), (b) or (d); and (ii) of Type B and C construction. (d) A column providing lateral support to a wall where the column complies with S5C6(1) and (2). (e) An element providing lateral support to a fire wall or fire-resisting wall, provided the wall is supported on both sides and failure of the element on one side does not affect the fire performance of the wall.		
S5C4: Lintels [2019: Spec C1.1: 2.3]	(1) A lintel must have the FRL required for the part of the building in which it is situated. (2) A lintel need not comply with (1) if it does not contribute to the support of a fire door, fire window or fire shutter, and— (a) it spans an opening in— (i) a wall of a building containing only one storey; or (ii) a non-loadbearing wall of a Class 2 or 3 building; or	Any lintels within the building must be in accordance with this clause and maintain the required FRL.	CRA – Refer Appendix F

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) it spans an opening in masonry which is not more than 150 mm thick and— (i) not more than 3 m wide if the masonry is non-loadbearing; or (ii) not more than 1.8 m wide if the masonry is loadbearing and part of a solid wall or one of the leaves of a cavity wall		
S5C5: Attachments not to impair fire-resistance [2019: Spec C1.1: 2.4]	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.	The FRL of supporting elements must be provided in accordance with this clause and maintain the required FRL.	CRA – Refer Appendix F
S5C6: General concessions [2019: Spec C1.1:2.5]	(1) Steel columns — A steel column, other than one in a fire wall or common wall, need not have an FRL in a building that contains— (a) only 1 storey; or (b) 2 storeys in some of its parts and 1 storey only in its remaining parts if the sum of the floor areas of the upper storeys of its 2 storey parts does not exceed the lesser of— (i) 1/8 of the sum of the floor areas of the 1 storey parts; or (ii) in the case of a building to which one of the maximum floor areas specified in Table C3D3 is applicable — 1/10 of that area; or (iii) in the case of a building to which two or more of the maximum floor area specified in Table C3D3 is applicable — 1/10 of the lesser of those areas. (2) Timber columns — A timber column may be used in a single storey building if—	For noting.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	(a) in a fire wall or common wall the column has an FRL not less than that listed in Table S5C11d, S5C21d or S5C24c as appropriate; and (b) in any other case where the column is required to have an FRL in accordance with Table S5C11a, S5C11c, S5C11g, S5C21a, S5C21c, S5C21g, S5C24a or S5C24b, it has an FRL of not less than 30/–/–. (3) Structures on roofs — A non-combustible structure situated on a roof need not comply with the other provisions of this Specification if it only contains— (a) lift motor equipment; or (b) one or more of the following: (i) Hot water or other water tanks. (ii) Ventilating ductwork, ventilating fans and their motors. (iii) Air-conditioning chillers. (iv) Window cleaning equipment. (v) Other service units that are non-combustible and do not contain flammable or combustible liquids or gases. (4) Curtain walls and panel walls — A requirement for an external wall to have an FRL does not apply to a curtain wall or panel wall which is of non-combustible construction and fully protected by automatic external wall-wetting sprinklers. (5) Balconies and verandahs — A balcony, verandah or the like and any incorporated supporting part, which is attached to or forms part of a building, need not comply with Table S5C11c, S5C11g, S5C21c, S5C21g, S5C24b or S5C24e if— (a) it does not form part of the only path of travel to a required exit from the building; and		

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) in Type A construction— (i) it is situated not more than 2 storeys above the lowest storey providing direct egress to a road or open space; and (ii) any supporting columns are of non-combustible construction.		
S5C7: Mezzanine floors: Concession [2019: Spec C1.1: 2.6]	NA	There are no mezzanine floors and therefore, this clause is not applicable.	NA
S5C8: Enclosure of shafts [2019: Spec C1.1: 2.7]	(1) Shafts required to have an FRL must be enclosed at the top and bottom by construction having an FRL not less than that required for the walls of a non-loadbearing shaft in the same building. (2) The provisions of (1) need not apply to— (a) the top of a shaft extending beyond the roof covering, other than one enclosing a fire-isolated stairway or ramp; or (b) the bottom of a shaft if it is non-combustible and laid directly on the ground.	**The garbage chute shafts are not proposed to be enclosed at the bottom and in lieu extend to the garbage rooms. A Fire Engineered Performance Solution is required to address this non-compliance.**	**PS – Refer to Part 3.3 of Report**
S5C9: Carparks in Class 2 and 3 Buildings [2019: Spec C1.1: 2.8]	(1) If a Class 2 building contains not more than 4 storeys of which— (a) one storey is Class 7 used solely for the purpose of parking motor vehicles or for some other purpose that is ancillary to a Class 2; and (b) the remaining storeys are of Class 2, the carpark storey is regarded as Class 2 only for the purpose of determining the relevant fire-resisting requirements of this Specification.	This clause is not applicable to the subject building due to number of storeys exceeded.	NA

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Clause	**Clause Requirements**	**Comment**	**Status**
	(2) If a Class 3 building or a building of Class 2 and 3 contains not more than 3 storeys of which— (a) one storey is Class 7 used solely for the purpose of parking motor vehicles or for some other purpose that is ancillary to the other storeys; and (b) the remaining storeys are of Class 2 or 3, the carpark storey is regarded as Class 2 or 3 only for the purpose of determining the relevant fire-resisting requirements of this Specification.		
S5C10: Residential Aged Care building: Concession [2019: Spec C1.1:2.9]	NA	This clause is not applicable to the subject building due to building classification.	NA
Type A fire-resisting construction [2019: Spec C1.1: 3.0]	Type A fire-resisting construction is applicable to the development.	Refer to part 3 clauses below for the relevant Type A Construction requirements appliable to the project.	-
S5C11: Fire-resistance of building elements [2019: Spec C1.1 3.1]	(1) In a building required to be of Type A construction— (a) each building element listed in Tables S5C11a, S5C11b, S5C11c, S5C11d, S5C11e, S5C11f and S5C11g, and any beam or column incorporated in it, must have an FRL not less than that listed in those Tables for the particular class of building concerned; and (b) any internal wall required to have an FRL with respect to integrity and insulation must extend to— (i) the underside of the floor next above; or (ii) the underside of a roof complying with Table S5C11g; or (iii) if under S5C15 the roof is not required to comply with Table S5C11g, the underside of the non-combustible roof covering and, except for roof	The building is required to be of Type A Construction. The structural engineer shall certify the design of fire-resisting building elements with the Construction Certificate application.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not be crossed by timber or other combustible building elements; or (iv) a ceiling that is immediately below the roof and has a resistance to the incipient spread of fire to the roof space between the ceiling and the roof of not less than 60 minutes; and (c) a loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft) must be constructed from— (i) concrete; or (ii) masonry; or (iii) subject to (2), fire-protected timber; or (iv) any combination of (i) to (iii); and (d) the FRLs specified in Table S5C11c for an external column apply also to those parts of an internal column that face and are within 1.5 m of a window and are exposed through that window to a fire-source feature. (2) For the purposes of (1)(c)(iii), fire-protected timber may be used, provided that— (a) the building is— (i) a separate building; or (ii) a part of a building— (A) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or (B) which is located above or below a part not containing fire-protected timber and the floor between the adjoining parts is provided with an FRL not less than that prescribed for a fire wall for the lower storey; and		

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Clause	**Clause Requirements**	**Comment**	**Status**
	(b) the building has an effective height of not more than 25 m; and (c) the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with Specification 17; and (d) any insulation installed in the cavity of the timber building element required to have an FRL is non-combustible; and (e) cavity barriers are provided in accordance with Specification 9. (3) For the purposes of Table S5C11a and Table S5C11b, external wall includes any column and other building element incorporated within it or other external building element.		
S5C12: Type A fire Resisting Construction - Concessions for floors [2019: Spec C1.1: 3.2]	A floor need not comply with Table S5C11g if— (a) it is laid directly on the ground; or (b) in a Class 2, 3, 5 or 9 building, the space below is not a storey, does not accommodate motor vehicles, is not a storage or work area, and is not used for any other ancillary purpose; or (c) it is a timber stage floor in a Class 9b building laid over a floor having the required FRL and the space below the stage is not used as a dressing room, store room, or the like; or (d) it is within a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building; or (e) it is an open-access floor (for the accommodation of electrical and electronic services and the like) above a floor with the required FRL.	The slab laid directly on the ground will not need to maintain an FRL in accordance with Table S5C11g.	Noted

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Clause	**Clause Requirements**	**Comment**	**Status**
S5C13: Type A fire Resisting Construction - Floor Loading of Class 5 and 9b buildings: Concession [2019: Spec C1.1: 3.3]	NA	This clause is not applicable to the subject building due to building classification.	NA
S5C14: Type A fire Resisting Construction - Roof superimposed on concrete slab: Concession [2019: Spec C1.1 3.4]	A roof superimposed on a concrete slab roof need not comply with S5C11 as to fire-resisting construction if— (a) the superimposed roof and any construction between it and the concrete slab roof are non-combustible throughout; and (b) the concrete slab roof complies with Table S5C11g.	It is noted that any concrete slabs proposed to be used as roofs throughout the building. This concession may be applied throughout.	CRA – Refer Appendix F
S5C15: Type A fire Resisting Construction - Roof: Concession [2019: Spec C1.1: 3.5]	A roof need not comply with Table S5C11g if its covering is non-combustible and the building— (a) has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 installed throughout; or (b) has a rise in storeys of 3 or less; or (c) is of Class 2 or 3; or (d) has an effective height of not more than 25 m and the ceiling immediately below the roof has a resistance to the incipient spread of fire to the roof space of not less than 60 minutes.	A roof need not comply with Table S5C11g if its covering is non-combustible due to the classification of the building and the sprinkler system being maintained.	CRA – Refer Appendix F
S5C16: Type A fire Resisting Construction - Roof lights [2019: Spec C1.1: 3.6]	If a roof is required to have an FRL or its covering is required to be non-combustible, roof lights or the like installed in that roof must— (a) have an aggregate area of not more than 20% of the roof surface; and (b) be not less than 3 m from—	**There is roof lights provided to the William St building. A Fire Engineered Performance Solution is required to address the following departures from the deemed-to-satisfy provisions:** + **The rooflights occupy more than 20% of the roof area**	**PS – Refer to Part 3.3 of Report**

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Clause	**Clause Requirements**	**Comment**	**Status**
	(i) any boundary of the allotment other than the boundary with a road or public place; and (ii) any part of the building which projects above the roof unless that part has the FRL required of a fire wall and any openings in that part of the wall for 6 m vertically above the roof light or the like are protected in accordance with C4D5; and (iii) any roof light or the like in an adjoining sole-occupancy unit if the walls bounding the unit are required to have an FRL; and (iv) any roof light or the like in an adjoining fire-separated section of the building; and (c) if a ceiling with a resistance to the incipient spread of fire is required, be installed in a way that will maintain the level of protection provided by the ceiling to the roof space.	+ **The rooflights are within 3m of the boundary, a part of the building which projects above the roof that does not have an FRL** + **An adjoining SOU roof light where the bounding walls are required to be fire rated** + **A roof light within an adjoining fire separated section of the building**	
S5C17: Type A fire Resisting Construction - Internal columns and walls: Concession [2019: Spec C1.1: 3.7]	For a building with an effective height of not more than 25 m and having a roof without an FRL in accordance with S5C15, in the storey immediately below that roof, internal columns other than those referred to in S5C11(1)(d) and internal walls other than fire walls and shaft walls may have— (a) in a Class 2 or 3 building: FRL 60/60/60; or (b) in a Class 5, 6, 7, 8 or 9 building— (i) with rise in storeys exceeding 3: FRL 60/60/60; or (ii) with rise in storeys not exceeding 3: no FRL.	This clause is not applicable due to effective height restrictions.	NA
S5C18: Type A fire Resisting Construction - Open spectator stands and indoor sports stadiums concession [2019: Spec C1.1: 3.8]	NA	This clause is not applicable to the subject building due to building classification.	NA

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Clause	**Clause Requirements**	**Comment**	**Status**
S5C19: Type A fire Resisting Construction - Carparks [2019: Spec C1.1: 3.9]	(1) Notwithstanding S5C11, a carpark may comply with this clause if it is an open-deck carpark or is protected with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 and is— (a) a separate building; or (b) a part of a building— (i) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or (ii) which is located above or below another classification, and the floor separating the classifications complies with C3D10; or (iii) which is located above another Class 7 part of the building not used for carparking, and the floor separating the parts complies with Table S5C11g for a Class 7 part other than a carpark; or (iv) which is located below another Class 7 part of the building not used for carparking, and the floor separating the parts complies with this clause. (2) For the purposes of this clause, a carpark— (a) includes— (i) an administration area associated with the functioning of the carpark; and (ii) where the carpark is sprinklered, is associated with a Class 2 or 3 building and provides carparking for separate sole-occupancy units, each carparking area with an area not greater than 10% of its floor area for purposes ancillary to the sole-occupancy units; but (b) excludes—	This concession is only considered to be applied if the sprinkler system being provided is in accordance with AS2118 and Specification 17.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	(i) except for (a), any area of another classification, or other part of a Class 7 building not used for carparking; and (ii) a building or part of a building specifically intended for the parking of trucks, buses, vans and the like. (3) For building elements in a carpark as described in (1) and (2), the following minimum FRLs are applicable: (a) External wall: (i) Less than 3 m from a fire-source feature to which it is exposed: (A) Loadbearing: 60/60/60. (B) Non-loadbearing: –/60/60. (ii) 3 m or more from a fire-source feature to which it is exposed: –/–/–. (b) Internal wall: (i) Loadbearing, other than one supporting only the roof (not used for carparking): 60/–/–. (ii) Supporting only the roof (not used for carparking): –/–/–. (iii) Non-loadbearing: –/–/–. (c) Fire wall: (i) From the direction used as a carpark: 60/60/60. (ii) From the direction not used as a carpark: as required by Table S5C11d. (d) Columns: (i) Supporting only the roof (not used for carparking) and 3 m or more from a fire-source feature to which it is exposed: –/–/–.		

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Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) Steel column, other than one covered by (i) and one that does not support a part of a building that is not used as a carpark— (A) 60/–/–; or (B) an ESA/M of not greater than 26 m^2/tonne. (iii) Any other column not covered by (i) or (ii): 60/–/–. (e) Beams: (i) Steel floor beam in continuous contact with a concrete floor slab— (A) 60/–/–; or (B) an ESA/M of not greater than 30 m^2/tonne. (ii) Any other beam: 60/–/–. (f) Fire-resisting lift and stair shaft (within the carpark only): 60/60/60. (g) Floor slab and vehicle ramp: 60/60/60. (h) Roof (not used for carparking): –/–/–. (4) For the purposes of sub-clause (3): (a) ESA/M means the ratio of exposed surface area to mass per unit length. (b) Refer to Specification 17 for special requirements for a sprinkler system in a carpark complying with (3) and located within a multi-classified building.		
S5C20: Type A fire Resisting Construction - Class 2 and 3 buildings: Concession [2019: Spec C1.1: 3.10]	(1) In a Class 2 or 3 building with a rise in storeys of not more than 3—	Concession is not applicable due the building having a rise in storeys of more than three (3).	NA

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Clause	**Clause Requirements**	**Comment**	**Status**
Specification 6 – Structural Tests For Lightweight Construction			
This Specification describes tests to be applied to and criteria to be satisfied by a wall system of lightweight construction. The manufactures generally provide evidence of compliance to this specification.			Noted
Specification 7 – Fire Hazard Properties			
S7C1: Scope [2019: Spec C1.10: 1]	This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.	Noted	-
S7C2: Application [2019: Spec C1.10: 2]	Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2	Noted	Noted
S7C3: Floor linings and floor coverings [2019: Spec C1.10: 3]	A floor lining or floor covering must have— (a) a critical radiant flux not less than that listed in Table S7C3; and (b) in a building not protected by a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17, a maximum smoke development rate of 750 percent-minutes; and (c) a group number complying with S7C6(b), for any portion of the floor covering that is continued more than 150 mm up a wall.	The floor linings or covering must be provided in accordance with this clause.	CRA – Refer Appendix F
S7C4: Wall and ceiling linings [2019: Spec C1.10: 4]	(1) A wall or ceiling lining system must comply with the group number specified in Table S7C4 and for buildings not fitted with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 have— (a) a smoke growth rate index not more than 100; or (b) an average specific extinction area less than 250 m^2/kg.	The wall and ceiling linings must be provided in accordance with this clause.	CRA – Refer Appendix F

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
	(2) A group number of a wall or ceiling lining and the smoke growth rate index or average specific extinction area must be determined in accordance with AS 5637.1.		
S7C5: Air-handling ductwork [2019: Spec C1.10: 5]	Rigid and flexible ductwork in a Class 2 to 9 building must comply with the fire hazard properties set out in AS 4254.1 and AS 4254.2.	The air handling ductwork must be provided in accordance with this clause.	CRA – Refer Appendix F
S7C6: Lift cars [2019: Spec C1.10: 6]	Materials used as— (a) floor linings and floor coverings must have a *critical radiant flux* not less than 2.2; and (b) wall and ceiling linings must be a Group 1 material or a Group 2 material in accordance with AS 5637.1:2015.	The materials in the lift car must be provided in accordance with this clause.	CRA – Refer Appendix F
S7C7: Other materials [2019: Spec C1.10: 7]	Materials and assemblies not included in S7C3, S7C4, S7C5 or S7C6 must not exceed the indices set out in Table S7C7.	Any other material proposed within the building must be provided in accordance with this clause.	CRA – Refer Appendix F
Specification 8 – Performance of External Walls in Fire			
This Specification contains measures to minimise, in the event of fire, the likelihood of external walls covered by S8C2 collapsing outwards as complete panels and the likelihood of panels separating from supporting members. Structural Engineer to consider this specification in their design.			Noted
Specification 9 – Cavity Barriers For Fire-Protected Timber			
This Specification sets out requirements for cavity barriers in fire-protected timber construction. Façade Engineer to consider in their design.			Noted
Specification 10 – Fire Protected Timber			
This Specification contains requirements for fire-protected timber and procedures for determining the time at which the temperature at the interface between the protection system and the timber is exceeded.			Noted

Section C: Fire Resistance			
Clause	**Clause Requirements**	**Comment**	**Status**
Specification 13 – Penetration of Walls, Floors and Ceilings by Services			
This Specification prescribes materials and methods of installation for services that penetrate walls, floors and ceilings required to have an FRL. A detailed design for penetrations is required and not part of this report.			Noted

Section D: Access and egress

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
Part D1 – Access and Egress			
Part D1 contains the Objectives, Functional Statements, Performance Requirements and Verification methods applicable to that part.			Noted
Part D2 – Provision for Escape			
D2D1: Deemed-to-Satisfy Provisions [2019: D1.0]	Informational	Noted	Noted
D2D2: Application of Part [2019: D1.1]	The Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a *sole-occupancy unit* in a Class 2 or 3 building or a Class 4 part of a building.	For noting.	Noted
NSW D2D3: Number of exits required [2019: D1.2]	(1) All buildings — Every building must have at least one exit from each storey. (2) Class 2 to 8 buildings — (a) In addition to any horizontal exit, not less than 2 exits must be provided from the following: (i) Each storey if the building has an effective height of more than 25 m. (ii) A Class 2 or 3 building subject to C2D6. (b) The requirements of (a)(i) do not apply to a part of a storey that— (i) is provided with direct egress to a road or open space; and (ii) satisfies D2D5 by the provision of 1 exit. (3) Basements — In addition to any horizontal exit, not less than 2 exits must be provided from any storey if egress	**A minimum of two exits are required to be provided to all storeys within the building. A minimum of two exits has been provided except for the following areas where only one exit has been provided:** + **The Fire Pump Room & Fire Tank Room** + **Throughout the Forbes Street Building**	**PS – Refer to Part 3.3 of Report**

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	from that storey involves a vertical rise within the building of more than 1.5 m, unless— (a) the floor area of the storey is not more than 50 m²; and (b) the distance of travel from any point on the floor to a single exit is not more than 20 m. (4) Class 9 buildings — (a) In addition to any horizontal exit, not less than 2 exits must be provided from the following: (i) Each storey if the building has a rise in storeys of more than 6 or an effective height of more than 25 m. (ii) Any storey which includes a patient care area in a Class 9a health-care building. (iii) Any storey that contains sleeping areas in a Class 9c building. (iv) Any storey used as a Class 9b early childhood centre, or any Class 9b early childhood centre which forms part of a storey. (v) Each storey in a primary or secondary school with a rise in storeys of 2 or more. (vi) Any storey or mezzanine that accommodates more than 50 persons, calculated under D2D18. (vii) Any storey or mezzanine within an auditorium in an entertainment venue. (b) The requirements of (a) do not apply to a part of a storey that— (i) is a plant room, machinery room, storeroom, lift-machine room or the like; and		

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) is provided with direct egress to a road, open space or a fire-isolated exit complying with D2D12(2); and (iii) satisfies D2D5 by the provision of 1 exit. (5) Exits from Class 9c buildings and patient care areas in Class 9a health-care buildings — In a Class 9a health-care building and a Class 9c building, at least one exit must be provided from every part of a storey which has been divided into fire compartments in accordance with C3D3 or C3D6. (6) Exits in open spectator stands — In an open spectator stand containing more than one tier of seating, every tier must have not less than 2 stairways or ramps, each forming part of the path of travel to not less than 2 exits. (7) Access to exits — Without passing through another sole-occupancy unit every occupant of a storey or part of a storey must have access to— (a) an exit; or (b) at least 2 exits if 2 or more exits are required.		
D2D4: When fire-isolated stairways and ramps are required [2019: D1.3]	(1) Class 2 and 3 buildings — The following applies: (a) Subject to (b), every stairway or ramp serving as a required exit must be fire-isolated unless it connects, passes through or passes by not more than— (i) 3 consecutive storeys in a Class 2 building; or (ii) 2 consecutive storeys in a Class 3 building. (b) Notwithstanding (a), one extra storey of any classification may be included if— (i) it is only for the accommodation of motor vehicles or for other ancillary purposes; or	Stairways are proposed to be fire-isolated where/as required by this clause. There is one non-fire isolated stair connecting Level 8 & 9 of William St West Building in accordance with this clause.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) the building has a sprinkler system (other than a FPAA101D system) complying with Specification 17 installed throughout; or (iii) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having— (A) an FRL of –/60/60, if non-loadbearing; and (B) an FRL of 90/90/90, if loadbearing; and (C) no opening that could permit the passage of fire or smoke. (2) Class 5, 6, 7, 8 or 9 buildings — Every stairway or ramp serving as a required exit must be fire-isolated unless— (a) in a Class 9a health-care building — it connects, or passes through or passes by not more than 2 consecutive storeys in areas other than patient care areas; or (b) it is part of an open spectator stand; or (c) in any other case, except in a Class 9b early childhood centre or a Class 9c building, it connects, passes through or passes by not more than 2 consecutive storeys and one extra storey of any classification may be included if— (i) the building has a sprinkler system (other than a FPAA101D system) complying with Specification 17 installed throughout; or (ii) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having— (A) an FRL of –/60/60, if non-loadbearing; and (B) an FRL of 90/90/90 for Type A construction or 60/60/60 for Type B or C construction, if loadbearing; and		

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(C) no opening that could permit the passage of fire or smoke.		
D2D5: Exit travel distances [2019: D1.4]	(1) Class 2 and 3 buildings — (a) The entrance doorway of any sole-occupancy unit must be not more than— (i) 6 m from an exit or from a point from which travel in different directions to 2 exits is available; or (ii) 20 m from a single exit serving the storey at the level of egress to a road or open space; and (b) no point on the floor of a room which is not in a sole-occupancy unit must be more than 20 m from an exit or from a point at which travel in different directions to 2 exits is available.	**A Fire Engineered Performance Solution is proposed to address the following departures from the deemed-to-satisfy provisions of this clause:** + **To all residential levels; an extended exit travel distance of up to 12m in lieu of 6m** + **To Basement 1 Forbes St building; an extended exit travel distance of up to 17m in lieu of 6m** + **To Upper Ground Floor William St West building; an extended exit travel distance of up to 25m in lieu of 20m to a POC from the residential lobby** + **To Plaza Level Dowling St building; an extended exit travel distance of up to 25m in lieu of 20m from the communal room**	**PS – Refer to Part 3.3 of Report**
	(3) Class 5, 6, 7, 8 or 9 buildings — Subject to (4), (5) and (6)— (a) no point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40 m; and (b) in a Class 5 or 6 building, the distance to a single exit serving a storey at the level of access to a road or open space may be increased to 30 m.	**A Fire Engineered Performance Solution is proposed to address the following departures from the deemed-to-satisfy provisions of this clause:** + **To all Basement levels; an extended exit travel distance of up to 30m in lieu of 20m to POC and up to 50m in lieu of 40m to the nearest exit.** + **To Plaza level; an extended exit travel distance of up to 30m in lieu of 20m from retail tenancies**	**PS – Refer to Part 3.3 of Report**

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
D2D6: Distance between alternative exits [2019: D1.5]	Exits that are required as alternative means of egress must be— (a) distributed as uniformly as practicable within or around the storey served and in positions where unobstructed access to at least 2 exits is readily available from all points on the floor including lift lobby areas; and (b) not less than 9 m apart; and (c) not more than— (i) in a Class 2 or 3 building — 45 m apart; or (ii) in a Class 9a health-care building, if such required exit serves a patient care area — 45 m apart; or (iii) in all other cases — 60 m apart; and (d) located so that alternative paths of travel do not converge such that they become less than 6 m apart.	**A Fire Engineered Performance Solution is proposed to address the following departures from the deemed-to-satisfy provisions of this clause:** + **To all Basement levels; the distance between alternative exits is up to 70m in lieu of 60m.** + **To Plaza Level; the distance between alternative exits is up to 90m in lieu of 45m (for Class 2 portion) and 60m (for Class 6, 7 & 8) portion** + **To Retail Laneway level; the distance between alternative exits is up to 50m in lieu of 45m to the William Street buildings.** + **To William Street East building and Dowling Street building; the distance between alternative exits is as low as 7m in lieu of 9m apart.** + **To Plaza Level Dowling Street fire stairs, the distance between alternative exits is as low as 5m in lieu of 9m.**	**PS – Refer to Part 3.3 of Report**
D2D7: Height of Exits, Paths of Travel to Exits and Doorways [2019: D1.6(a)]	In a required exit or path of travel to an exit the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm	The ceiling heights provided throughout it is noted that the sufficient clearance will be maintained along the egress paths in accordance with this clause.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
NSW D2D8: Width of exits and paths of travel to exits [2019: D1.6(b), (c), (d) and (e)]	(1) The unobstructed width of each required exit or path of travel to an exit, except for ladders provided in accordance with D2D21, D3D23 or I3D5, and doorways, must be not less than— (a) 1 m; or (b) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or ward area; and (c) in a public corridor in a Class 9c aged care building, notwithstanding (2) and (3)— (i) 1.5 m; and (ii) 1.8 m for the full width of the doorway, providing access into a sole-occupancy unit or communal bathroom. (2) If the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width of required exits or paths of travel to an exit, except for doorways, must be not less than— (a) 1 m plus 250 mm for each 25 persons (or part) in excess of 100; or (b) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or ward area. (3) If the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width of required exits or paths of travel to an exit, except for doorways, must be not less than— (a) 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or	The dimensions of exits and paths of travel to exits have been assessed and found to generally comply with the requirements of this clause.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200. (4) In an open spectator stand which accommodates more than 2000 persons, the aggregate unobstructed width of required exits or paths of travel to an exit, except for doorways, must be not less than 17 m plus a width (in metres) equal to the number in excess of 2000 divided by 600. (5) In a Class 9b building used as an entertainment venue— (a) the aggregate width must be not less than 2 m plus 500 mm for every 50 persons or part in excess of 200; and (b) D2D8(1), (2) and (3) do not apply; and (c) where one or more paths of travel merge, the width of the combined path of travel must be not less than the sum of the required widths of those paths of travel; and (d) the required widths of those paths of travel connecting the exits from the building to a public road or open space must comply with (c); or		
NSW D2D9: Width of doorways in exits or paths of travel to exits [2019: D1.6(f)]	In a required exit or path of travel to an exit, the unobstructed width of a doorway must be not less than— (a) in patient care areas through which patients would normally be transported in beds— (i) if the doorway provides access to, or from, a corridor of width— (A) less than 2.2 m — 1200 mm; or (B) 2.2 m or greater — 1070 mm; and (ii) where the doorway referred to in (i) is fitted with two leaves and one leaf is secured in the closed position in	The dimensions of exits and paths of travel to exits have been assessed and found to generally comply with the requirements of this clause. Care shall be given to the detailing of handrails and other fixtures and fittings to ensure they do not encroach into the required clear widths and clear heights for paths of travel to exits. Compliance is achievable	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	accordance with D3D26(3)(e), the other leaf must permit an unobstructed opening not less than 800 mm wide; or (b) in patient care areas in a horizontal exit — 1250 mm; or (c) the unobstructed width of each exit provided to comply with D2D8(1), (2), (3) or (4), minus 250 mm; or (d) in a Class 9c building, 800 mm, except— (i) in resident use areas the minimum unobstructed width must be 870 mm; and (ii) for doorways leading from a public corridor to a sole-occupancy unit the minimum unobstructed width must be 1070 mm; and (iii) where the doorway is fitted with two leaves and one leaf is secured in the closed position in accordance with D3D26(3)(e), the other leaf must permit an unobstructed opening not less than 870 mm wide in resident use areas and 800 mm wide in non-resident use areas; or (e) in a Class 9b building used as an entertainment venue— (i) in parts of the building used by the public, the width of the required exit or path of travel, and the unobstructed width of each doorway must not be less than 1 m and not more than 3 m; and (ii) in other parts of the building, doorways must comply with NSW D2D9; or (f) in any other case except where it opens to a sanitary compartment or bathroom — 750 mm wide.		
D2D10: Exit width not to diminish in direction of travel [2019: D1.6(g)]	The unobstructed width of a required exit must not diminish in the direction of travel to a road or open space, except	The dimensions of exits and paths of travel to exits have been assessed and found to generally comply with the requirements of this clause. Care shall be given to the	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i).	detailing of handrails and other fixtures and fittings to ensure they do not encroach into the required clear widths and clear heights for paths of travel to exits. Compliance is achievable.	
D2D11: Determination and measurement of exits and paths of travel to exits [2019: D1.6(h) and (i)]	For the purposes of D2D7 to D2D10 the following apply: (a) The required width of a stairway or ramp in a required exit or path of travel to an exit must— (i) be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; and (ii) extend without interruption, except for ceiling cornices, to a height not less than 2 m vertically above a line along the nosings of the treads or the floor surface of the ramp or landing. (b) To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18.	For noting.	CRA – Refer Appendix F
D2D12: Travel via fire-isolated exits [2019: D1.7]	(1) A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated unless it is from— (a) a public corridor, public lobby or the like; or (b) a sole-occupancy unit occupying all of a storey; or (c) a sanitary compartment, airlock or the like. (2) Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway— (a) to a road or open space; or (b) to a point— (i) in a storey or space, within the confines of the building, that is used only for pedestrian	**A Fire Engineered Performance Solution is required to address the following departures from the deemed-to-satisfy provisions of this clause:** + **WE-FS01 & FPR-FS discharges into a shared corridor, in lieu of being provided with independent egress.** + **All fire stairs discharge into a covered area that is not open for at least 1/3 its perimeter** + **Forbes Street Fire Stair 01, Dowling Street both fire stairs, WE-FS-02 & B-FS-02. WW-FS-02 discharge path will require occupants to pass by unprotected openings.**	**PS – Refer to Part 3.3 of Report**

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	movement, car parking or the like and is open for at least ⅔ of its perimeter; and (ii) from which an unimpeded path of travel, not further than 20 m, is available to a road or open space; or (c) into a covered area that— (i) adjoins a road or open space; and (ii) is open for at least ⅓ of its perimeter; and (iii) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and (iv) provides an unimpeded path of travel from the point of discharge to the road or open space of not more than 6 m. (3) Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6 m of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, the following applies: (a) That part of the wall must have— (i) an FRL of not less than 60/60/60; and (ii) any openings protected internally in accordance with C4D5; and (b) The protection required by (a) must extend for a distance of 3 m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser. (4) If more than 2 access doorways, not from a sanitary compartment or the like, open to a required fire-isolated exit in the same storey—	+ **Forbes Street Fire Stair 01, Dowling Street both fire stairs, WE-FS-02 & B-FS-02, WW-FS-02 discharge path is more than 6m to a road or open space.**	

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(a) a smoke lobby in accordance with D3D7 must be provided; or (b) the exit must be pressurised in accordance with AS 1668.1. (5) A ramp must be provided at any change in level less than 600 mm in a fire-isolated passageway in a Class 9 building.		
D2D13: External stairways or ramps in lieu of fire-isolated exits [2019: D1.8]	NA	This clause is not applicable to the subject building.	NA
D2D14: Travel by non-fire-isolated stairways or ramps [2019: D1.9]	(1) A non-fire-isolated stairway or non-fire-isolated ramp serving as a required exit must provide a continuous means of travel by its own flights and landings from every storey served to the level at which egress to a road or open space is provided. (2) In a Class 2, 3 or 4 building, the distance between the doorway of a room or sole-occupancy unit and the point of egress to a road or open space by way of a stairway or ramp that is not fire-isolated and is required to serve that room or sole-occupancy unit must not exceed— (a) 30 m in a building of Type C construction; or (b) 60 m in all other cases. (3) In a Class 5, 6, 7, 8 or 9 building, the distance from any point on a floor to a point of egress to a road or open space by way of a required non-fire-isolated stairway or non-fire-isolated ramp must not exceed 80 m. (4) In a Class 2, 3 or 9a building, a required non-fire-isolated stairway or non-fire-isolated ramp must discharge at a point not more than—	There is a non-fire-isolated stairway connecting Level 08 & 09 of William St West building. **The non-fire-isolated stairway does not comply with any of the deemed-to-satisfy provisions of this clause as it does not provide a continuous means of travel by its own flights and landings from every storey served to the level at which egress to a road or open space is provided. Therefore, a Fire Engineered Performance Solution is required to wholistically address the non-fire-isolated stair where it does not comply with D2D14.**	**PS – Refer to Part 3.3 of Report**

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(a) 15 m from a doorway providing egress to a road or open space or from a fire-isolated passageway leading to a road or open space; or (b) 30 m from one of 2 such doorways or passageways if travel to each of them from the non-fire-isolated stairway or non-fire-isolated ramp is in opposite or approximately opposite directions. (5) In a Class 5 to 8 or 9b building, a required non-fire-isolated stairway or non-fire-isolated ramp must discharge at a point not more than— (a) 20 m from a doorway providing egress to a road or open space or from a fire-isolated passageway leading to a road or open space; or (b) 40 m from one of 2 such doorways or passageways if travel to each of them from the non-fire-isolated stairway or non-fire-isolated ramp is in opposite or approximately opposite directions. (6) In a Class 2 or 3 building, if 2 or more exits are required and are provided by means of internal non-fire-isolated stairways or non-fire-isolated ramps each exit must— (a) provide separate egress to a road or open space; and (b) be suitably smoke-separated from each other at the level of discharge.		
NSW D2D15: Discharge from exits [2019: D1.10]	(1) An exit must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit, or access to it. (2) If a required exit leads to an open space, the path of travel to the road must have an unobstructed width throughout of not less than— (a) the minimum width of the required exit; or	**A Fire Engineered Performance Solution is required to address the following departures from the deemed-to-satisfy provisions of this clause:** + **Dowling St Building alternative exits discharge adjacent to each other in lieu of as far apart as practical.**	**PS – Refer to Part 3.3 of Report**

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) 1 m, whichever is the greater. (3) If an exit discharges to open space that is at a different level than the public road to which it is connected, the path of travel to the road must be by— (a) a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if required by the Deemed-to-Satisfy Provisions of Part D4; or (b) except if the exit is from a Class 9a building, a stairway complying with the Deemed-to-Satisfy Provisions of the NCC. (4) The discharge point of alternative exits must be located as far apart as practical. (5) In a Class 9b building which is an open spectator stand that accommodates more than 500 persons, a required stairway or required ramp must not discharge to the ground in front of the stand. (6) In a Class 9b building used as an entertainment venue, at least half of the required number of exits from each storey or mezzanine, and at least half of the aggregate width of such exits must discharge otherwise than through the main entrance, or the area immediately adjacent to the main entrance to the building. (7) The number of persons accommodated must be calculated according to D2D18.		
D2D16: Horizontal exits [2019: D1.11]	NA	No horizontal exits are proposed and therefore, this clause is not applicable.	NA

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Clause	**Clause Requirements**	**Comment**	**Status**
D2D17: Non-required stairways, ramps or escalators [2019: D1.12]	An escalator, moving walkway or non-required non fire-isolated stairway or pedestrian ramp— (a) must not be used between storeys in— (i) a patient care area in a Class 9a health-care building; or (ii) a resident use area in a Class 9c building; and (b) may connect any number of storeys if it is— (i) in an open spectator stand or indoor sports stadium; or (ii) in a carpark or an atrium; or (iii) outside a building; or (iv) in a Class 5 or 6 building that is sprinklered throughout, where the escalator, walkway, stairway or ramp complies with Specification 14; and (c) except where permitted in (b) must not connect more than— (i) 3 storeys if— (A) each of those storeys is provided with a sprinkler system (other than a FPAA101D system) complying with Specification 17 throughout; and (B) at least one of those storeys is situated at a level at which there is a direct egress to a road or open space; or (ii) 2 storeys, provided that those storeys are consecutive, and one of the storeys is situated at a level at which there is direct egress to a road or open space; and (d) except where permitted in (b) or (c), must not connect, directly or indirectly, more than 2 storeys at any level in a Class 5, 6, 7, 8 or 9 building and those storeys must be consecutive.	The non-required stairways & escalators do not connect more than two storeys and can therefore comply with this clause.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
D2D18: Number of persons accommodated [2019: D1.13]	For the purposes of the Deemed-to-Satisfy Provisions, the number of persons accommodated in a storey, room or mezzanine must be determined with consideration to the purpose for which it is used and the layout of the floor area by— (a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in Table D2D18 according to the use of that part, excluding spaces set aside for— (i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and (ii) service ducts and the like, sanitary compartments or other ancillary uses; or (b) reference to the seating capacity in an assembly building or room; or (c) any other suitable means of assessing its capacity.	No information from the client has been provided regarding the expected number of persons accommodated by the building. We have conducted a preliminary assessment based on Table D2D18. **Refer to Part 3.1 of this report for the population table.** For the Class 6 portions of the building the building can accommodate the following: + Total retail shop patrons: 435 + Total retail F&B patrons: 45 + Total retail employees: 52 The Class 2 areas population shall be determined by estimating 2 persons per bed provided.	**FI – Refer to Part 3.1 of Report**
D2D19: Measurement of distances [2019: D1.14]	The nearest part of an exit means in the case of— (a) a fire-isolated stairway, fire-isolated passageway, or fire-isolated ramp, the nearest part of the doorway providing access to them; and (b) a non-fire-isolated stairway, the nearest part of the nearest riser; and (c) a non-fire-isolated ramp, the nearest part of the junction of the floor of the ramp and the floor of the storey; and (d) a doorway opening to a road or open space, the nearest part of the doorway; and (e) a horizontal exit, the nearest part of the doorway.	For noting.	Noted
D2D20: Method of Measurement [2019: D1.15]	Informational	Noted	Noted

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
D2D21: Plant rooms, lift motor rooms and electricity network substations: concession [2019: D1.16]	(1) A ladder may be used in lieu of a stairway to provide egress from— (a) a plant room with a floor area of not more than 100 m^2; or (b) all but one point of egress from a plant room, a lift machine room or a Class 8 electricity network substation with a floor area of not more than 200 m^2. (2) A ladder permitted under (1)— (a) may— (i) form part of an exit provided that in the case of a fire-isolated stairway it is contained within the shaft; or (ii) discharge within a storey in which case it must be considered as forming part of the path of travel; and (b) for a plant room or a Class 8 electricity network substation, must comply with AS 1657; and (c) for a lift machine room, where access is provided from within a machine room to a secondary floor, a fixed rung type ladder complying with AS 1657 may be used, provided that— (i) the height between the floors is not more than 2800 mm; and (ii) the ladder is inclined at an angle to the horizontal not less than 65 degrees nor more than 75 degrees; and (iii) the distance between the front face of the ladder and any adjacent obstruction is not less than— (A) 960 mm, where the ladder is inclined 65 degrees to the horizontal; or	Where plant rooms, lift motor rooms or electricity network substations are provided, access may be provided in accordance with this clause.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(B) 760 mm, where the ladder is inclined 75 degrees to the horizontal; or (C) a distance that is determined by interpolating the values in (A) and (B), where the ladder is inclined at any angle between 65 degrees and 75 degrees to the horizontal; and (iv) a clear space not less than 600 mm exists between the foot of the ladder and any equipment.		
D2D22: Access to lift pits [2019: D1.17]	Access to lift pits must— (a) where the pit depth is not more than 3 m, be through the lowest landing doors; or (b) where the pit depth is more than 3 m, be provided through an access doorway complying with the following: (i) In lieu of D2D7 to D2D11, the doorway must be level with the pit floor and not be less than 600 mm wide by 1980 mm high clear opening, which may be reduced to 1500 mm where it is necessary to comply with (ii). (ii) No part of the lift car or platform must encroach on the pit doorway entrance when the car is on a fully compressed buffer. (iii) Access to the doorway must be by a stairway complying with AS 1657. (iv) In lieu of D3D26, doors fitted to the doorway must be— (A) of the horizontal sliding or outwards opening hinged type; and (B) self-closing and self-locking from the outside; and (C) marked on the landing side with the letters not less than 35 mm high:	Compliance is readily achievable with the requirements of this clause and shall be certified by the lift supplier. Access to the lift pits is assumed to be through the bottom landing doors.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	DANGER LIFTWELL – ENTRY OF UNAUTHORIZED PERSONS PROHIBITED – KEEP CLEAR AT ALL TIMES		
D2D23: Egress from primary schools [2019: D1.18]	NA	This clause is not applicable to the subject building.	NA
Part D3 – Construction of Exits			
D3D1: Deemed-to-Satisfy Provisions [2019: D2.0]	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance RequirementsD1P1 to D1P6, D1P8 and D1P9 are satisfied by complying with— (a) D2D2 to D2D23, D3D2 to D3D30 and D4D2 to D4D13; and (b) in a building containing an atrium, Part G3; and (c) in a building in an alpine area, Part G4; and (d) for a building containing an occupiable outdoor area, Part G6; and (e) for additional requirements for Class 9b buildings, Part I1; and (f) for public transport buildings, Part I2; and (g) for farm buildings and farm sheds, Part I3. (2) Where a Performance Solution is proposed the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable. (3) Performance RequirementD1P7 must be complied with if lifts are to be used to assist occupants to evacuate a building.	Noted	Noted
NSW D3D2: Application of Part [2019: D2.1]	(1) Except for— (a) D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D22(5), D3D22(6), D3D26 and D3D29, the	For noting.	Noted

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 3 building; and (b) D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D22(5), D3D22(6), D3D23 and D3D29, the Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 building or Class 4 part of a building. (2) In a Class 9b building used as an entertainment venue— (a) Clauses NSW D3D14(1)(i), (j), and (k), NSW D3D16(d), NSW D3D18(1)(d), and NSW D3D24(2)(e) apply to only those parts of the building used by the public; and (b) the general requirements of Part D3 apply to all other parts of the building.		
D3D3: Fire-isolated stairways and ramps [2019: D2.2]	The fire isolated stairways must be constructed of *non-combustible* materials and constructed so that if there is local failure it will not cause structural damage to, or impair the fire-resistance of the shaft.	Compliance is readily achievable with the requirements of this Clause. The fire-isolated stairway shall be entirely non-combustible, and the Structural Engineer shall certify compliance with the requirements of this Clause in their design.	CRA – Refer Appendix F
D3D4: Non-fire-isolated stairways and ramps [2019: D2.3]	In a building having a rise in storeys of more than 2, required stairs and ramps (including landings and any supporting building elements) which are not required to be within a fire-resisting shaft, must be constructed according to D3D3, or only of— (a) reinforced or prestressed concrete; or (b) steel in no part less than 6 mm thick; or (c) timber that— (i) has a finished thickness of not less than 44 mm; and	Compliance is readily achievable with the requirements of this Clause. The non-fire-isolated stairway shall be entirely constructed in accordance with this clause, and the Structural Engineer shall certify compliance with the requirements of this Clause in their design.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) has an average density of not less than 800 kg/m^3 at a moisture content of 12%; and (iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.		
D3D5: Separation of rising and descending stair flights [2019: D2.4]	If a stairway serving as an exit is required to be fire-isolated— (a) there must be no direct connection between— (i) a flight rising from a storey below the lowest level of access to a road or open space; and (ii) a flight descending from a storey above that level; and (b) any construction that separates or is common to the rising and descending flights must be— (i) non-combustible; and (ii) smoke proof in accordance with S11C2.	**A Fire Engineered Performance Solution shall address the lack of separation between rising and descending stairs to the following locations:** + **Forbes Street Fire Stair 01** + **Dowling Street Fire Stair** + **William Street West FS-02 & WW-LD 01** + **William Street East FS-02 & B-FS-02**	**PS – Refer to Part 3.3 of Report**
D3D6: Open access ramps and balconies [2019: D2.5]	NA	There are no open access ramps or balconies proposed.	NA
D3D7: Smoke lobbies [2019: D2.6]	A smoke lobby required by D2D12 must— (a) have a floor area not less than 6 m^2; and (b) be separated from the occupied areas in the storey by walls which are impervious to smoke, and— (i) have an FRL of not less than 60/60/– (which may be fire-protective grade plasterboard, gypsum block with set plaster, face brickwork, glass blocks or glazing); and	Smoke lobbies are not required to be provided and therefore, this clause is not applicable.	NA

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) extend from slab to slab, or to the underside of a ceiling with a resistance to the incipient spread of fire of 60 minutes which covers the lobby; and (iii) any construction joints between the top of the walls and the floor slab, roof or ceiling must be smoke sealed with intumescent putty or other suitable material; and (c) at any opening from the occupied areas, have smoke doors complying with S12C3 and S12C4 except that the smoke sensing device need only be located on the approach side of the opening; and (d) be pressurised as part of the exit if the exit is required to be pressurised under E2D3.		
D3D8: Installations in exits and paths of travel [2019: D2.7]	(1) Access to service shafts and services other than to fire-fighting or detection equipment as permitted in the Deemed-to-Satisfy Provisions of Section E, must not be provided from a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp. (2) An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like, must not be located in any part of a required exit or any corridor, hallway, lobby or the like leading to a required exit. (3) Gas or other fuel services must not be installed in a required exit. (4) Except for in a fire-isolated exit specified in (1), services or equipment enclosed in accordance with (5) may be installed in a required exit, or in any corridor, hallway, lobby or the like leading to a required exit, where that service or equipment comprises— (a) electricity meters, distribution boards or ducts; or	Compliance is readily achievable with the requirements of this clause. No non-required services shall be installed within the fire- isolated stairway shaft, and all EDB's, comms boards and the like shall be enclosed within non-combustible and smoke-sealed enclosures. The services engineers and architect shall certify compliance with the requirements of this clause with the Construction Certificate application.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) central telecommunications distribution boards or equipment; or (c) electrical motors or other motors serving equipment in the building. (5) An enclosure for the purposes of (4) must be suitably sealed against smoke spreading from the enclosure and be— (a) non-combustible construction; or (b) a fire-protective covering. (6) Electrical wiring may be installed in a fire-isolated exit if the wiring is associated with— (a) a lighting, detection, or pressurisation system serving the exit; or (b) a security, surveillance or management system serving the exit; or (c) an intercommunication system or an audible or visual alarm system in accordance with D3D27; or (d) the monitoring of hydrant or sprinkler isolating valves.		
D3D9: Enclosure of space under stairs and ramps [2019: D2.8]	(1) Fire-isolated stairways and ramps — If the space below a required fire-isolated stairway or fire-isolated ramp is within the fire-isolated shaft, it must not be enclosed to form a cupboard or similar enclosed space. (2) Non fire-isolated stairways and ramps — The space below a required non fire-isolated stairway (including an external stairway) or non fire-isolated ramp must not be enclosed to form a cupboard or other enclosed space unless— (a) the enclosing walls and ceilings have an FRL of not less than 60/60/60; and	There are no enclosed spaces below the required fire-isolated stairways.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) any access doorway to the enclosed space is fitted with a self-closing –/60/30 fire door.		
D3D10: Width of stairways and ramps [2019: D2.9]	A required stairway or ramp that exceeds 2 m in width is counted as having a width of only 2 m unless it is divided by a handrail or barrier continuous between landings and each division has a width of not more than 2 m.	For noting.	Noted
D3D11: Pedestrian ramps [2019: D2.10]	(1) A fire-isolated ramp may be substituted for a fire-isolated stairway if the construction enclosing the ramp and the width and ceiling height comply with the requirements for a fire-isolated stairway. (2) A ramp serving as a required exit must— (a) where the ramp is also serving as an accessible ramp under Part D4, be in accordance with AS 1428.1; or (b) in any other case, have a gradient not steeper than 1:8. (3) The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586.	There are no ramps serving as required exits.	N/A
D3D12: Fire-isolated passageways [2019: D2.11]	(1) The enclosing construction of a fire-isolated passageway must have an FRL when tested for a fire outside the passageway in another part of the building of— (a) if the passageway discharges from a fire-isolated stairway or ramp — not less than that required for the stairway or ramp shaft; or (b) in any other case — not less than 60/60/60. (2) Notwithstanding (1)(b), the top construction of a fire-isolated passageway need not have an FRL if the walls of the fire-isolated passageway extend to the underside of— (a) a non-combustible roof covering; or	Compliance is readily achievable with the requirements of this clause. The fire-isolated passageways shall be entirely non-combustible and achieve the same FRL as the stairways which they serve, and the Structural Engineer shall certify compliance with the requirements of this clause with the Construction Certificate application.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) a ceiling having a resistance to the incipient spread of fire of not less than 60 minutes separating the roof space or ceiling space in all areas surrounding the passageway within the fire compartment.		
D3D13: Roof as open space [2019: D2.12]	If an exit discharges to a roof of a building, the roof must— (a) have an FRL of not less than 120/120/120; and (b) not have any roof lights or other openings within 3 m of the path of travel of persons using the exit to reach a road or open space.	**The fire-isolated exits will discharge to the Plaza Level podium roof and egress route swill pass within 3m of openings for services and drainage**	**PS – Refer to Part 3.3 of Report**
NSW D3D14: Goings and risers [2019: D2.13]	(1) A stairway must have— (a) not more than 18 and not less than 2 risers in each flight; and (b) going (G), riser (R) and quantity (2R + G) in accordance with Table D3D14, except as permitted by (2) and (3); and (c) constant goings and risers throughout each flight, except as permitted by (2) and (3), and the dimensions of goings (G) and risers (R) in accordance with (1)(b) are considered constant if the variation between— (i) adjacent risers, or between adjacent goings, is no greater than 5 mm; and (ii) the largest and smallest riser within a flight, or the largest and smallest going within a flight, does not exceed 10 mm; and (d) risers which do not have any openings that would allow a 125 mm sphere to pass through between the treads; and (e) treads which have—	Goings and risers are required to be provided in accordance with this clause. Details such as slip-resistance and nosing strips has not been provided and can be detailed during a later CC stage.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(i) a surface with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; or (ii) a nosing strip with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; and (f) treads of solid construction (not mesh or other perforated material) if the stairway is more than 10 m high or connects more than 3 storeys; and (g) in a Class 9b building, not more than 36 risers in consecutive flights without a change in direction of at least 30°; and (h) in the case of a required stairway, no winders in lieu of a landing; and (i) conspicuous edges to the treads of steps in a Class 9b building used as an entertainment venue; and (j) in a Class 9b building used as an entertainment venue, not more than one helical stairway serving as a required exit and that stairway must— (i) have a width of not less than 1500 mm; and (ii) be of constant radius; and (iii) be constructed so that each tread, when measured 500 mm in from its narrow end, has a width of at least 280 mm; and (k) in a Class 9b building used as an entertainment venue, in a curved stairway serving as a required exit — an internal radius of not less than twice the width of the stair. (2) In the case of a non-required stairway— (a) the stairway must have—		

<table>
<tr><th colspan="4">Section D: Access and Egress</th></tr>
<tr><th>Clause</th><th>Clause Requirements</th><th>Comment</th><th>Status</th></tr>
<tr><td></td><td>(i) not more than 3 winders in lieu of a quarter landing; and
(ii) not more than 6 winders in lieu of a half landing; and
(b) the going of all straight treads must be constant throughout the same flight and the dimensions of goings (G) is considered constant if the variation between—
(i) adjacent goings, is no greater than 5 mm; and
(ii) the largest and smallest going within a flight, does not exceed 10 mm; and
(c) the going of all winders in lieu of a quarter or half landing may vary from the going of the straight treads within the same flight provided that the going of all such winders is constant.
(3) Where a stairway discharges to a sloping public walkway or public road—
(a) the riser (R) may be reduced to account for the slope of the walkway or road; and
(b) the quantity (2R+G) may vary at that location.</td><td></td><td></td></tr>
<tr><td>D3D15: Landings
[2019: D2.14]</td><td>Landings must be not less than 750 mm long and have either a surface with a slip-resistance classification complying with Table D3D15 or a strip at the edge of the landing with a slip-resistance classification complying with Table D3D15 when tested in accordance with AS 4586:2013.
<table>
<tr><th rowspan="2">Application</th><th colspan="2">Surface Condition</th></tr>
<tr><th>Dry</th><th>Wet</th></tr>
<tr><td>Ramp steeper than 1:14</td><td>P4 or R11</td><td>P5 or R12</td></tr>
</table></td><td>Landings have been provided that are minimum 750mm long.
Details such as slip-resistance has not been provided and can be detailed during a later CC Stage.</td><td>CRA – Refer Appendix F</td></tr>
</table>

Section D: Access and Egress				
Clause	**Clause Requirements**		**Comment**	**Status**
	Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10 P4 or R11		
	Tread or landing surface	P3 or R10 P4 or R11		
	Nosing or landing edge strip	P3 P4		
NSW D3D16: Thresholds [2019: D2.15, NSW 2.15 (d), (e)]	The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless— (a) in patient care areas in a Class 9a health-care building, the door sill is not more than 25 mm above the finished floor level to which the doorway opens; or (b) in resident use areas in a Class 9c building, a ramp is provided with a maximum gradient of 1:8 for a maximum height of 25 mm over the threshold; or (c) in a building required to be accessible by Part D4, the doorway— (i) opens to a road or open space; and (ii) is provided with a threshold ramp or step ramp in accordance with AS 1428.1; or (d) in a Class 9b building used as an entertainment venue, the door sill of a doorway opening to a road, open space, external stair landing or external balcony is not more than 50 mm above the finished floor level to which the doorway opens; or (e) in other cases— (i) the doorway opens to a road or open space, external stair landing or external balcony; and		The majority of doorways are internal doorways and therefore it is assumed there are no steps at the threshold of doorways.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.		
D3D17: Barriers to prevent falls [2019: D2.16(a) – (c)]	(1) A continuous barrier must be provided along the side of— (a) a roof to which general access is provided; and (b) a stairway or ramp; and (c) a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and (d) any delineated path of access to a building, (e) if the trafficable surface is 1 m or more above the surface beneath. (2) The requirements of (1) do not apply to— (a) the perimeter of a stage, rigging loft, loading dock or the like; or (b) areas referred to in D3D23; or (c) a retaining wall, unless the retaining wall forms part of, or is directly associated with a delineated path of access to a building from the road, or a delineated path of access between buildings; or (d) a barrier provided to an openable window covered by D3D29. (3) A barrier required by (1) must be constructed in accordance with D3D18, D3D19, D3D20 and, if a wire barrier is used, D3D21.	Barriers are required to be provided in accordance with this clause. Barrier details have not been provided. It is considered that barriers are capable of achieving compliance with this clause subject to further details being provided during CC stage.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
NSW D3D18: Height of Barriers [2019: Table D2.16(a)]	(1) The height of a barrier required by D3D17 must be not less than the following: (a) For stairways or ramps with a gradient of 1:20 or steeper — 865 mm. (b) For landings to a stair or ramp where the barrier is provided along the inside edge of the landing and does not exceed 500 mm in length — 865 mm. (c) In front of fixed seating on a mezzanine or balcony within an auditorium in a Class 9b building— (i) 1 m; or (ii) 700 mm where the horizontal projection extends not less than 1 m outwards from the top of the barrier; or (iii) in a Class 9b building used as an entertainment venue, the height prescribed for guardrails in NSW I4D41 or NSW I5D9. (d) In a Class 9b building used as an entertainment venue, for stairways and ramps and the floor of any access path, balcony, landing or the like— (i) 1 m when provided inside the building; and (ii) 1200 mm when provided externally to the building. (e) For all other locations — 1 m. (2) For a barrier provided under (1) — (a) barrier heights are measured vertically from the surface beneath, except that for stairways the height must be measured above the nosing line of the stair treads; and (b) a transition zone may be incorporated where the barrier height changes from 865 mm on a stair flight or ramp to 1 m at a landing or floor.	Barriers are required to be provided in accordance with this clause. Barrier details have not been provided. It is considered that barriers are capable of achieving compliance with this clause subject to further details being provided during CC stage.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
D3D19: Openings in barriers [2019: Table D2.16(a)]	(1) Except where allowed by (2), openings in a required barrier must not allow a 125 mm sphere to pass through. (2) In a fire-isolated stairway, fire-isolated ramp or other area used primarily for emergency purposes, openings in a required barrier— (a) must not allow a 300 mm sphere to pass through; or (b) where rails are used— (i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony or the like; and (ii) the opening between rails must not be more than 460 mm. (3) In Class 7 (other than carparks) and Class 8 buildings, openings in a required barrier— (a) must not allow a 300 mm sphere to pass through; or (b) where rails are used— (i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony or the like; and (ii) the opening between the rails must not be more than 460 mm. (4) The requirements of (2) do not apply to external stairways, external ramps, or fire-isolated stairways or fire-isolated ramps serving Class 9b early childhood centres. (5) For a barrier provided under (1), the maximum 125 mm barrier opening for a stairway, such as a non fire-isolated	Barriers are required to be provided in accordance with this clause. Barrier details have not been provided. It is considered that barriers are capable of achieving compliance with this clause subject to further details being provided during CC stage.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	stairway, is measured above the nosing line of the stair treads. (6) Where a required barrier is fixed to the vertical face forming an edge of a landing, balcony, deck, stairway or the like, the opening formed between the barrier and the face must not exceed 40 mm. (7) For the purposes of (6), the opening is measured horizontally from the edge of the trafficable surface to the nearest internal face of the barrier.		
D3D20: Barrier climbability [2019: Table D2.16(a)]	(1) A barrier required by D3D17, located on a floor more than 4 m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150 mm and 760 mm above the floor. (2) The requirements of (1) do not apply to— (a) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, other than— (i) external stairways; and (ii) external ramps; and (b) Class 7 (other than carparks) and Class 8 buildings.	Barriers are required to be provided in accordance with this clause. Barrier details have not been provided. It is considered that barriers are capable of achieving compliance with this clause subject to further details being provided during CC stage.	CRA – Refer Appendix F
D3D21: Wire barriers [2019: D2.16(d)]	Where a required barrier is constructed of wire, it is deemed to meet the requirements of D3D19(1) if it is constructed in accordance with the following: (a) For horizontal wire systems— (i) when measured with a strain indicator, it must be in accordance with the tension values in Table D3D21a; or (ii) must not exceed the maximum deflections in Table D3D21c.	Where wire barriers are proposed they shall be provided in accordance with this clause. Wire barrier details have not been provided. It is considered that barriers are capable of achieving compliance with this clause subject to further details being provided during CC stage.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) For non-continuous vertical wire systems, when measured with a strain indicator, must be in accordance with the tension values in Table D3D21a (see Note 4). (c) For continuous vertical or continuous near vertical sloped wire systems— (i) must have wires of no more than 2.5 mm diameter with a lay of 7×7 or 7×19 construction; and (ii) changes in direction at support rails must pass around a pulley block without causing permanent deformation to the wire; and (iii) must have supporting rails, constructed with a spacing of not more than 900 mm, of a material that does not allow deflection that would decrease the tension of the wire under load; and (iv) when the wire tension is measured with a strain indicator, it must be in accordance with the tension values in Table D3D21b and measured in the furthermost span from the tensioning device.		
D3D22: Handrails [2019: D2.17]	(1) Except for handrails referred to in D3D23, and subject to (2), handrails must— (a) be located along at least one side of the ramp or flight; and (b) be located along each side if the total width of the stairway or ramp is 2 m or more; and (c) in a Class 9b building used as a primary school or a building that contains an early childhood centre— (i) have one handrail fixed at a height of not less than 865 mm; and (ii) in addition to (i), have a handrail— (A) fixed at a height between 665 mm and 750 mm in a primary school; and	Handrails are required to be provided to all stairs and ramps proposed to the subject development. Handrails details have not been provided. It is considered handrails are capable of achieving compliance with this clause subject to further details being provided during CC stage.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(B) with a cross-sectional dimension not less than 16 mm and not greater than 45 mm as measured in any direction across its centre, fixed at a height between 450 mm and 700 mm in a Class 9b early childhood centre; and (d) in any other case, be fixed at a height of not less than 865 mm; and (e) be continuous between stair flight landings and have no obstruction on or above them that will tend to break a hand-hold; and (f) in a required exit serving an area required to be accessible, be designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail required by (1)(c)(ii). (2) The height required by (1)(c) and (d) is measured above the nosings of stair treads and the floor surface of the ramp, landing or the like. (3)Handrails— (a) in a Class 9a health-care building must be provided along at least one side of every passageway or corridor used by patients, and must be— (i) fixed not less than 50 mm clear of the wall; and (ii) where practicable, continuous for their full length; and (b) in a Class 9c aged care building must be provided along both sides of every passageway or corridor used by residents, and must be— (i) fixed not less than 50 mm clear of the wall; and (ii) where practicable, continuous for their full length. (4) Handrails required to assist people with a disability must be provided in accordance with D4D4.		

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(5)Handrails to a stairway or ramp within a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building must— (a) be located along at least one side of the flight or ramp; and (b) be located along the full length of the flight or ramp, except in the case where a handrail is associated with a barrier, the handrail may terminate where the barrier terminates; and (c) have the top surface of the handrail not less than 865 mm vertically above the nosings of the stair treads or the floor surface of the ramp; and (d) have no obstruction on or above them that will tend to break a handhold, except for newel posts, ball type stanchions, or the like. (6) The requirements of (5) do not apply to— (a) handrails referred to in D3D23; or (b) a stairway or ramp providing a change in elevation of less than 1 m; or (c) a landing; or (d) a winder where a newel post is installed to provide a handhold.		
D3D23: Fixed platforms, walkways stairways and ladders [2019: D2.18]	A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail or barrier attached thereto may comply with AS 1657 in lieu of D3D14, D3D15, D3D17, D3D18, D3D19, D3D20, D3D21 and D3D22 if it only serves— (a) machinery rooms, boiler houses, lift-machine rooms, plant-rooms, and the like; or (b) non-habitable rooms, such as attics, storerooms and the like that are not used on a frequent or daily basis in the	For noting.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	internal parts of a sole-occupancy unit in a Class 2 building or Class 4 part of a building.		
NSW D3D24: Doorways and doors [2019: D2.19]	(1) A doorway in a resident use area of a Class 9c building must not be fitted with— (a) a sliding fire door; or (b) a sliding smoke door; or (c) a revolving door; or (d) a roller shutter door; or (e) a tilt-up door. (2) A doorway serving as a required exit or forming part of a required exit, or a doorway in a patient care area of a Class 9a health-care building— (a) must not be fitted with a revolving door; and (b) must not be fitted with a roller shutter or tilt-up door unless— (i) it serves a Class 6, 7 or 8 building or part with a floor area not more than 200 m^2; and (ii) the doorway is the only required exit from the building or part; and (iii) it is held in the open position while the building or part is lawfully occupied; and (c) must not be fitted with a sliding door unless— (i) it leads directly to a road or open space; and (ii) the door is able to be opened manually under a force of not more than 110 N; and (d) if fitted with a door which is power-operated— (i) it must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and	The doorways in the required exit swing in the direction of egress.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) if it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door. (e) in a Class 9b building used as an entertainment venue— (3) A power-operated door in a path of travel to a required exit, except for a door in a patient care area of a Class 9a health-care building as provided in (2), must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source.		
D3D25: Swinging doors [2019: D2.20]	(1) A swinging door in a required exit or forming part of a required exit— (a) must not encroach— (i) at any part of its swing by more than 500 mm on the required width (including any landings) of a required stairway, ramp or passageway if it is likely to impede the path of travel of the people already using the exit; and (ii) when fully open, by more than 100 mm on the required width of the required exit; and (b) must swing in the direction of egress unless— (i) it serves a building or part with a floor area not more than 200 m^2, it is the only required exit from the building or part and it is fitted with a device for holding it in the open position; or (ii) it serves a sanitary compartment or airlock (in which case it may swing in either direction); or (c) must not otherwise impede the path or direction of egress.	The majority of swinging doors have been configured to ensure they comply with the requirements of this clause. However, the doorway serving the fire control room into the fire isolated exit does not swing in the direction of egress. This is considered to be a requirement of Specification 19 and would therefore override this requirement. **A Fire Engineered Performance Solution is required to address where the Plaza Level Forbes St building lobby fire stair door does not swing in the direction of egress.**	**PS – Refer to Part 3.3 of Report**

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(2) The measurement of encroachment referred to in (1)(a) in each case is to include door handles or other furniture or attachments to the door.		
NSW D3D26: Operation of latch [2019: D2.21]	(1) A door in a required exit, forming part of a required exit or in the path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress, by— (a) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area required to be accessible by Part D4— (i) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and (ii) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or (b) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor. (2) Where the latch operation device referred to in (1)(b) is not located on the door leaf itself— (a) manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located— (i) not less than 500 mm from an internal corner; and (ii) for a hinged door, between 1 m and 2 m from the door leaf in any position; and	The latches throughout the egress paths of the building are required to be provided in accordance with this clause. This will require a single hand downward action or pushing action on a single device which is located between 900mm and 1.1 m from the floor. A door schedule has not been provided; Further details are required to be assessed during CC Stage.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(iii) for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position; and (b) braille and tactile signage complying with S15C3 and S15C6 must identify the latch operation device. (3) The requirements of (1) and (2) do not apply to a door that— (a) serves a vault, strong-room, sanitary compartment, or the like; or (b) serves only, or is within— (i) a sole-occupancy unit in a Class 2 building or a Class 4 part of a building; or (ii) a sole-occupancy unit in a Class 3 building (other than an entry door to a sole-occupancy unit of a boarding house, guest house, hostel, lodging house or backpacker accommodation); or (iii) a sole-occupancy unit with a floor area not more than 200 m^2 in a Class 5, 6, 7 or 8 building; or (iv) a space which is otherwise inaccessible to persons at all times when the door is locked; or (c) complies with (4) and serves— (i) Australian Government Security Zones 4 or 5; or (ii) the secure parts of a bank, detention centre, mental health facility, early childhood centre or the like; or (d) is fitted with a fail-safe device which automatically unlocks the door upon the activation of any sprinkler system (other than a FPAA101D system) complying with Specification 17 or smoke, or any other detector system deemed suitable in accordance with AS 1670.1		

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	installed throughout the building, and is readily openable when unlocked; or (e) is in a Class 9a or 9c building and— (4) A door referred to in (3)(c) must be able to be immediately unlocked— (a) by operating a fail-safe control switch, not contained within a protective enclosure, to actuate a device to unlock the door; or (b) by hand by a person or persons, specifically nominated by the owner, properly instructed as to the duties and responsibilities involved and available at all times when the building is lawfully occupied so that persons in the building or part may immediately escape if there is a fire. (5) The requirements of (1) and (2) do not apply in a Class 9b building (other than a school, an early childhood centre or a building used for religious purposes) to a door in a required exit, forming part of a required exit or in the path of travel to a required exit serving a storey or room accommodating more than 100 persons, determined in accordance with D2D18, in which case it must be readily openable— (a) without a key from the side that faces a person seeking egress; and (b) by a single hand pushing action on a single device such as a panic bar located between 900 mm and 1.2 m from the floor; and (c) where a two-leaf door is fitted, the provisions of (a) and (b) need only apply to one door leaf if the appropriate requirements of D2D9 are satisfied by the opening of that one leaf; and (d) where the door is a door in a path of travel providing re-entry to the building from a balcony,		

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	terrace or the like, it may be fitted with key-operated fastenings only, the tongues of which must be locked in the retracted position whenever the building is occupied by the public, so the door can yield to pressure. (6) The requirements of (1), (2) and (5) do not apply to a door serving a Class 9b building used as an entertainment venue where the following provisions apply to a door or gate used by the public— (a) on a door, the single device operating the latch or bolts must be a panic bar if those doors are to be secured; or (b) an exit door or gate used by the public as the main entrance may be fitted with key-operated fastenings only, the tongues of which must be locked in the retracted position whenever the building is occupied by the public so the door or gate can yield to pressure from within; or (c) a door from a balcony, terrace or the like, being a door in a path of travel providing re-entry to the building, may comply with the locking provision of (b) above.		
D3D27: Re-entry from fire-isolated exits [2019: D2.22]	(1) Doors of a fire-isolated exit must not be locked from the inside as follows: (a) In a Class 9a health-care building. (b) In a Class 9b early childhood centre. (c) In a Class 9c building. (d) In a fire-isolated exit serving any storey above an effective height of 25 m, throughout the exit. (2) The requirements of (1)(a), (c) and (d) do not apply to a door fitted with a fail-safe device that automatically unlocks the door upon the activation of a fire alarm and—	Re-Entry from fire-isolated stairs is required to be provided as the building has an effective height above 25m. Further details to be provided during CC stage.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	(a) on at least every fourth storey, the doors are not able to be locked and a sign is fixed on such doors stating that re-entry is available; or (b) an intercommunication system, or an audible or visual alarm system, operated from within the enclosure is provided near the doors and a sign is fixed adjacent to such doors explaining its purpose and method of operation. (3) The requirements of (1)(b) do not apply to a door fitted with a fail-safe device that automatically unlocks the door serving the Class 9b early childhood centre upon the activation of a fire alarm.		
D3D28: Signs on doors [2019: D2.23]	(1) A sign, to alert persons that the operation of certain doors must not be impaired, must be installed where it can readily be seen on, or adjacent to— (a) a required— (i) fire door providing direct access to a fire-isolated exit, except a door providing direct egress from a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building; and (ii) smoke door; and (b) any door which is a— (i) fire door forming part of a horizontal exit; and (ii) smoke door that swings in both directions; and (iii) door leading from a fire isolated exit to a road or open space. (2) A sign required by (1)(a) must be fixed on the side of the door that faces a person seeking egress and, if the door is fitted with a device for holding it in the open position, either a sign must be fixed on the wall adjacent to	Signs shall be provided on prescribed doors in accordance with this clause's requirements.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	the doorway, or signs must be fixed to both sides of the door. (3) A sign required by (1)(b) must be fixed on each side of the door. (4) A sign referred to in (1) must be in capital letters not less than 20 mm high in a colour contrasting with the background and state the following: (a) For an automatic door held open by an automatic hold-open device— **FIRE SAFETY DOOR — DO NOT OBSTRUCT** (b) For a self-closing door— **DO NOT OBSTRUCT** **DO NOT KEEP OPEN** **FIRE SAFETY DOOR** (c) For a door discharging from a fire-isolated exit— **FIRE SAFETY DOOR — DO NOT OBSTRUCT**		
D3D29: Protection of openable windows [2019: D2.24]	(1) A window opening must be provided with protection, if the floor below the window is 2 m or more above the surface beneath in— (a) a bedroom in a Class 2 or 3 building or Class 4 part of a building; or (b) a Class 9b early childhood centre. (2) Where the lowest level of the window opening is less than 1.7 m above the floor, a window opening covered by (1) must comply with the following: (a) The openable portion of the window must be protected with— (i) a device capable of restricting the window opening; or	Protection of openable windows shall be provided in accordance with the requirements of this clause. Further details to be provided during CC Stage.	CRA – Refer Appendix F

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) a screen with secure fittings. (b) A device or screen required by (a) must— (i) not permit a 125 mm sphere to pass through the window opening or screen; and (ii) resist an outward horizontal action of 250 N against the— (A) window restrained by a device; or (B) screen protecting the opening; and (iii) have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden. (3) A barrier with a height not less than 865 mm above the floor is required to an openable window— (a) in addition to window protection, when a child resistant release mechanism is required by (2)(b)(iii); and (b) where the floor below the window is 4 m or more above the surface beneath if the window is not covered by (1). (4) A barrier covered by (3) except for (5) must not— (a) permit a 125 mm sphere to pass through it; and (b) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing. (5) A barrier required by (3) to an openable window in— (a) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, excluding external stairways and external ramps; and (b) Class 7 (other than carparks) and Class 8 buildings and parts of buildings containing those classes,		

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
	must not permit a 300 mm sphere to pass through it.		
D3D30: Timber stairways: concession [2019: D2.25]	NA	This clause is not applicable to the subject building.	NA

Section D: Access and Egress			
Clause	**Clause Requirements**	**Comment**	**Status**
Part D4 – Access for People with A Disability			
See separate Access Report for details. Part D4 does not form part of this report.			

Section E: Services and equipment

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
Part E1 – Fire Fighting Equipment			
E1D1: Deemed-to-Satisfy Provisions [2019: E1.0]	Informational	Noted	Noted
E1D2: Fire hydrants [2019: E1.3]	(1) A fire hydrant system must be provided to serve a building— (a) having a total floor area greater than 500 m^2; and (b) where a fire brigade station is— (i) no more than 50 km from the building as measured along roads; and (ii) equipped with equipment capable of utilising a fire hydrant. (2) The fire hydrant system must be installed in accordance with AS 2419.1. (3) Notwithstanding (2), a Class 8 electricity network substation need not comply with clause 4.2 of AS 2419.1 if— (a) it cannot be connected to a town main supply; and (b) one hour water storage is provided for fire-fighting. (4) Where internal fire hydrants are provided, they must serve only the storey on which they are located except that a sole-occupancy unit— (a) in a Class 2 or 3 building or Class 4 part of a building may be served by a single fire hydrant located at the level of egress from that sole-occupancy unit; or (b) of not more than 2 storeys in a Class 5, 6, 7, 8 or 9 building may be served by a single fire hydrant located	A fire hydrant system is required to be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause. **A Fire Engineered Performance Solution is required to address the following departures from the deemed-to-satisfy provisions of this clause:** + **To permit the fire hydrant booster to be located in an area not within sight of the main entry into the building due to multiple building entrances.**	**PS – Refer to Part 3.3 of Report**

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	at the level of egress from that sole-occupancy unit provided the fire hydrant can provide coverage to the whole of the sole-occupancy unit.		
E1D3: Fire hose reels [2019: E1.4]	(1) E1D3 does not apply to— (a) a Class 2, 3 or 5 building or Class 4 part of a building; or (b) a Class 8 electricity network substation; or (c) a Class 9c building; or (d) classrooms and associated corridors in a primary or secondary school. (2) A fire hose reel system must be provided— (a) to serve the whole building where one or more internal fire hydrants are installed; or (b) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500 m^2. (3) The fire hose reel system must— (a) have fire hose reels installed in accordance with AS 2441; and (b) provide fire hose reels to serve only the storey at which they are located, except a sole-occupancy unit of not more than 2 storeys in a Class 6, 7, 8 or 9 building may be served by a single fire hose reel located at the level of egress from that sole-occupancy unit provided the fire hose reel can provide coverage to the whole of the sole-occupancy unit. (4) Fire hose reels must be located internally, externally or in combination, to achieve the system coverage specified in AS 2441. (5) In achieving system coverage, one or a combination of the following criteria for individual internally located fire	Fire hose reels are required to be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause. **A Fire Engineered Performance Solution is required to address the following departures from the deemed-to-satisfy provisions of this clause:** + **To omit fire hose reel coverage to the garbage / bin room enclosed in fire-rated construction and forming the base of the garbage shaft.**	**PS – Refer to Part 3.3 of Report**

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	hose reels must be met in determining the layout of any fire hose reel system: (a) Fire hose reels must be located adjacent to an internal fire hydrant (other than one within a fire-isolated exit), except that a fire hose reel need not be located adjacent to every fire hydrant, provided system coverage can be achieved. (b) Fire hose reels must be located within 4 m of an exit, except that a fire hose reel need not be located adjacent to every exit, provided system coverage can be achieved. (c) Where system coverage is not achieved by compliance with (a) and (b), additional fire hose reels may be located in paths of travel to an exit to achieve the required coverage. (6) Fire hose reels must be located so that the fire hose will not need to pass through doorways fitted with fire or smoke doors, except— (a) doorways in walls referred to in C3D6(1)(e) in a Class 9a building and C3D6(3)(d) in a Class 9c building, separating ancillary use areas of high potential fire hazard; and (b) doorways in walls referred to in C3D13 or C3D14 separating equipment or electrical supply systems; and (c) doorway openings to shafts referred to in C4D14. (7) Where the normal water supply cannot achieve the flow and pressures required by AS 2441, or is unreliable— (a) a pump; or (b) water storage facility; or (c) both a pump and water storage facility, must be installed to provide the minimum flow and pressures required by clause 6.1 of AS 2441.		

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
E1D4: Sprinklers [2019: E1.5]	A sprinkler system must— (a) be installed in a building or part of a building when required by E1D5 to E1D13 as applicable; and (b) comply with Specification 17 and Specification 18 as applicable.	Sprinklers are required to be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
E1D5: Where sprinklers are required: all classifications [2019: Table E1.5]	Sprinklers are required throughout the whole building if any part of the building has an effective height of more than 25 m— (a) including an open-deck carpark within a multi-classified building; but (b) excluding— (i) an open-deck carpark being a separate building; and (ii) a Class 8 electricity network substation, with a floor area not more than 200 m^2, located within a multi-classified building.	Sprinklers are required to be provided throughout the building due to the effective height being greater than 25m. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
E1D6: Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings. [2019: Table E1.5]	(1) In a Class 2 or 3 building, or any multi-classified building containing a Class 2 or 3 part, sprinklers are required throughout the whole building if any part of the building has— (a) a rise in storeys of 4 or more; and (b) an effective height of not more than 25 m. (2) The requirements of (1) do not apply to a residential care building.	Sprinklers to be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
E1D7: Where sprinklers are required: Class 3 building used as a residential care buildings. [2019: Table E1.5]	NA	This clause is not applicable to the subject building due to building classification.	NA

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
E1D8: Where sprinklers are required: Class 6 building. [2019: Table E1.5]	In a Class 6 building, sprinklers are required in fire compartments where either of the following apply: (a) A floor area of more than 3 500 m^2. (b) A volume of more than 21 000 m^3.	Sprinklers to be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
E1D9: Where sprinklers are required: Class 7a building other than an open deck carpark. [2019: Table E1.5]	In a Class 7a building, other than an open-deck carpark, sprinklers are required in fire compartments where more than 40 vehicles are accommodated.	Sprinklers to be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
E1D10: Where sprinklers are required: Class 9a health care building used as a residential care building, Class 9c buildings. [2019: Table E1.5]	NA	This clause is not applicable to the subject building due to building classification.	NA
E1D11: Where sprinklers are required: Class 9b buildings. [2019: Table E1.5]	NA	This clause is not applicable to the subject building due to building classification.	NA
E1D12: Where sprinklers are required: additional requirements. [2019:Table E1.5]	(1) For sprinkler requirements for atriums, see Part G3. (2) For sprinkler requirements for large isolated buildings, see C3D4.	This clause is not applicable to the subject building.	NA
E1D13: Where sprinklers are required: occupancies of excessive hazard. [2019: Table E1.5]	(1) In occupancies of excessive hazard, sprinklers are required in fire compartments where either of the following apply: (a) A floor area of more than 2 000 m^2. (b) A volume of more than 12 000 m^3. (2) For the purposes of (1), occupancies of excessive fire hazard comprise buildings which contain—	This clause is not applicable to the subject building.	NA

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(a) hazardous processes or storage including the following: (i) Aircraft hangars. (ii) Cane furnishing manufacture, processing and storage. (iii) Fire-lighter and fireworks manufacture and warehousing. (iv) Foam plastic and foam plastic goods manufacture, processing and warehousing e.g. furniture factory. (v) Hydrocarbon based sheet product, manufacture, processing and warehousing e.g. vinyl floor coverings. (vi) Woodwool and other flammable loose fibrous material manufacture. (b) combustible goods with an aggregate volume exceeding 1000 m^3 and stored to a height greater than 4 m including the following: (i) Aerosol packs with flammable contents. (ii) Carpets and clothing. (iii) Electrical appliances. (iv) Combustible compressed fibreboards (low and high density) and plywoods. (v) Combustible cartons, irrespective of content. (vi) Esparto and other fibrous combustible material. (vii) Furniture including timber, cane and composite, where foamed rubber or plastics are incorporated.		

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(viii) Paper storage (all forms of new or waste) e.g. bales, sheet, horizontal or vertical rolls, waxed coated or processed. (ix) Textiles raw and finished, e.g. rolled cloth, clothing and manchester. (x) Timber storage including sheets, planks, boards, joists and cut sizes. (xi) Vinyl, plastic, foamed plastic, rubber and other combustible sheets, offcuts and random pieces and rolled material storage, e.g. carpet, tar paper, linoleum, wood veneer and foam mattresses. (xii) All materials having wrappings or preformed containers of foamed plastics.		
E1D14: Portable fire extinguishers [2019: E1.6]	(1) Portable fire extinguishers must be— (a) provided as listed in (3) and (4); and (b) for a Class 2, 3 or 5 building or Class 4 part of a building, provided— (i) to serve the whole Class 2, 3 or 5 building or Class 4 part of a building where one or more internal fire hydrants are installed; or (ii) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500 m^2, and for the purposes of this clause, a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building is considered to be a fire compartment; and (c) subject to (2), selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444. (2) Portable fire extinguishers provided in a Class 2 or 3 building or Class 4 part of a building must be— (a) an ABE type fire extinguisher; and	Portable fire extinguishers are required to be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) a minimum size of 2.5 kg; and (c) distributed outside a sole-occupancy unit— (i) to serve only the storey at which they are located; and (ii) so that the travel distance from the entrance doorway of any sole-occupancy unit to the nearest fire extinguisher is not more than 10 m. (3) In Class 2 to 9 buildings (except within sole-occupancy units of a Class 9c building), portable fire extinguishers must be provided as follows: (a) To cover Class AE or E fire risks associated with emergency services switchboards. (b) To cover Class F fire risks involving cooking oils and fats in kitchens. (c) To cover Class B fire risks in locations where flammable liquids in excess of 50 litres are stored or used (not including that held in fuel tanks of vehicles). (d) To cover Class A fire risks in normally occupied fire compartments less than 500 m^2 not provided with fire hose reels (excluding open-deck carparks). (e) To cover Class A fire risks in classrooms and associated corridors in primary and secondary schools not provided with fire hose reels. (f) To cover Class A fire risks associated with a Class 2, 3 or 5 building or Class 4 part of a building. (4) In addition to the requirements of (3), portable fire extinguishers must be provided to cover Class A and E fire risks in the following occupancies in buildings, or parts of a building: (a) A Class 9a health-care building, including a Class 9a building used as a residential care building.		

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) Class 3 parts of detention and correctional occupancies. (c) Class 3 accommodation for children, aged persons and people with disabilities, including a Class 3 building used as a residential care building. (d) A Class 9c building. (5) For the purposes of (3) and (4): (a) Fire risks are defined in accordance with AS 2444. (b) An emergency services switchboard is one which sustains emergency equipment operating in the emergency mode. (c) Additional extinguishers may be required to cover fire risks in relation to special hazards provided for in E1D17. (d) The fire risks in a Class 2 or 3 building or Class 4 part of a building must include risks within any sole-occupancy units, however portable fire extinguishers are not required to be located within a sole-occupancy unit unless the sole-occupancy unit has a floor area greater than 500 m^2. (6) For the purposes of (4), where applicable, a Class E fire extinguisher need only be located at each nurses' station, supervisors' station or the like.		
E1D15: Fire control centres [2019: E1.7]	A fire control centre facility in accordance with Specification 19 must be provided for— (a) a building with an effective height of more than 25 m; and (b) a Class 6, 7, 8 or 9 building with a total floor area of more than 18 000 m^2.	A fire control room is required to be provided in accordance with this clause. **A Fire Engineered Performance Solution is proposed to address where the fire control room is not accessible from the "front entrance" of the building and where access to the fire control room involves a level change of more than 300mm.**	**PS – Refer to Part 3.3 of Report**

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
E1D16: Fire precautions during construction [2019: E1.9]	In a building under construction— (a) not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit; and (b) after the building has reached an effective height of 12 m— (i) the required fire hydrants and fire hose reels must be operational in at least every storey that is covered by the roof or the floor structure above, except the 2 uppermost storeys; and (ii) any required booster connections must be installed.	For noting.	Noted
E1D17: Provision for special hazards [2019: E1.10]	Suitable additional provision must be made if special problems of fighting fire could arise because of— (a) the nature or quantity of materials stored, displayed or used in a building or on the allotment; or (b) the location of the building in relation to a water supply for fire-fighting purposes.	**The Fire Engineering Report shall address the following special hazards identified:** + **EV Charging** + **E-Bikes** + **Solar Panels**	**PS – Refer to Part 3.3 of report**

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
Specification 17 – Fire Sprinkler Systems			
S17C1: Scope [2019: Spec E1.5:1]	This Specification sets out requirements for the design and installation of fire sprinkler systems.	Noted	Noted
S17C2: Application of automatic fire sprinkler standards [2019: Spec E1.5:2]	An automatic fire sprinkler system shall comply with AS2118 as relevant to the building classification and the design of the hydraulic consultant. Where the building is residential class 2 or 3 then refer to Specification 18 for specific design requirements and concessions.	For noting.	CRA – Refer Appendix F
S17C3: Separation of sprinklered and non-sprinklered areas [2019: Spec E1.5:3]	NA	The entire building is proposed to be sprinkler protected and therefore, this clause is not applicable.	NA
S17C4: Protection of openings [2019: Spec E1.5:4]	NA	The entire building is proposed to be sprinkler protected and therefore, this clause is not applicable.	NA
S17C5: Quick response sprinklers [2019: Spec E1.5:5]	Quick response sprinklers may be installed only if they are suitable for the type of application proposed and it is demonstrated that the sprinkler system is designed to accommodate their use.	The fire services engineer is to design and certify the sprinkler protection throughout the building, and any system departures (if any) are to be determined and advised by the fire services engineer responsible for designing and certifying the building's hydraulic fire services.	CRA – Refer Appendix F
S17C6: Sprinkler valve enclosures [2019: Spec E1.5:6]	(1) Sprinkler alarm valves must be located in a secure room or enclosure which has direct egress to a road or open space. (2) All sprinkler valve rooms and enclosures must be secured with a system suitable for use by the fire brigade.	**Architect and fire services consultant to confirm where the sprinkler valve enclosure has been located within the building.**	**FI – Refer to Part 3.1 of Report**

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
S17C7: Water supply [2019: Spec E1.5:7]	(1) A required sprinkler system must be provided with at least one water supply. (2) A required sprinkler system in a building greater than 25 m in effective height must be provided with a dual water supply except that a secondary water supply storage capacity of 25,000 litres may be used if— (a) the storage tank is located at the topmost storey of the building; and (b) the building occupancy is classified as no more hazardous than Ordinary Hazard 2 (OH2) under AS 2118.1; and (c) an operational fire brigade service is available to attend a building fire.	**A dual water supply is required due to the building's effective height greater than 25m.** **Architect and fire services consultant to confirm the water supply system is adequate for the building.**	**FI – Refer to Part 3.1 of Report**
S17C8: Building occupant warning system [2019: Spec E1.5:8]	A required sprinkler system, except a FPAA101D sprinkler system, must be connected to and activate a building occupant warning system complying with S20C7.	The sprinkler system must activate a building occupant warning system in accordance with this clause.	CRA – Refer Appendix F
S17C9: Connection to Other Systems [2019: Spec E1.5:9]	Where a smoke hazard management system is installed and is actuated by smoke detectors, the sprinkler system must, wherever practicable, be arranged to also activate the smoke hazard management system.	Clause not applicable due to other smoke hazard management systems not being provided in the building.	NA
S17C10: Anti-tamper Devices [2019: Spec E1.5:10]	(1) Where a sprinkler system is installed— (a) over any stage area in a theatre, public hall or the like, visual and audible status indication of sprinkler valves must be provided at the location normally used by the stage manager; or (b) in a space housing lift electrical and control equipment (including machine rooms, secondary floors and sheave rooms), any valves provided to control sprinklers in these spaces must be located adjacent to the space.	Where anti-tamper devices are provided to sprinklers, they shall be installed in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(2) Any valves provided to control sprinklers required by (1) must be fitted with anti-tamper monitoring devices connected to a monitoring panel.		
S17C11: Sprinkler Systems in Carparks [2019: Spec E1.5:11]	A sprinkler system protecting a carpark complying with S5C19(3) in a multi-classified building must— (a) be independent of the sprinkler system protecting any part of the building not used as a carpark; or (b) if forming part of a sprinkler system protecting a part of the building not used as a carpark, be designed such that the section protecting the non-carpark part can be isolated without interrupting the water supply or otherwise affecting the effective operation of the section protecting the carpark.	The sprinkler system shall be designed in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
S17C12: Residential Care Buildings [2019: Spec E1.5:12]	NA	This clause is not applicable to the subject building.	NA
S17C13: Sprinkler systems in lift installations [2019: Spec E1.5:13]	(1) Where sprinklers are installed in a space housing lift electrical and control equipment, including machine rooms, secondary floors and sheave rooms, sprinklers in these spaces must— (a) have heads protected from accidental damage by way of a guard that will not impair the performance of the head; and (b) be capable of being isolated and drained, either separately or collectively, without isolating any other sprinklers within the building. (2) Valves provided to control sprinklers referred to in (1) must be installed in accordance with S17C10(2).	Where sprinklers are installed in a space housing lift electrical and control equipment, including machine rooms, secondary floors and sheave rooms, sprinklers in these spaces must be provided in accordance with this Clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
S17C14: Early childhood centres [New for 2022]	Quick response sprinklers must be provided to a Class 9b early childhood centre required to have an automatic fire sprinkler system.	This clause is not applicable to the subject building due to building classification.	NA
Specification 19 – Fire Control Centres			
S19C1: Scope [2019: Spec E1.8:1]	(1) This Specification describes the construction and content of required fire control centres and rooms. (2) A fire control room is a fire control centre in a dedicated room with additional specific requirements	Noted	Noted
S19C2: Application [2019: Spec E1.8:1]	(1) S19C3 to S19C6 apply to fire control centres (including fire control rooms). (2) S19C7 to S19C13 apply additional requirements to fire control rooms.	For noting.	Noted
S19C3: Purpose and content of fire control rooms [2019: Spec E1.8:2]	A fire control centre must— (a) provide an area from which fire-fighting operations or other emergency procedures can be directed or controlled; and (b) contain controls, panels, telephones, furniture, equipment and the like associated with the required fire services in the building; and (c) not be used for any purpose other than the control of— (i) fire-fighting activities; and (ii) other measures concerning the occupant safety or security.	A Fire Control Room is required to be provided due to effective height.	CRA – Refer Appendix F
S19C4: Location of fire control centre [2019: Spec E1.8:3]	A fire control centre must be so located in a building that egress from any part of its floor to a road or open space, does not involve changes in level which in aggregate exceed 300 mm.	The Fire Control Room is located at Upper Ground Floor William Street East building adjacent from Retail 10 and accessed via William Street and the fire-isolated passageway.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
		The fire control room is located such that the elevation difference between the room and the street is no more than 300mm to both Dowling & William Street.	
S19C5: Equipment not permitted within a fire control centre [2019: Spec E1.8:4]	An internal combustion engine, pumps, sprinkler control valves, pipes and pipe fittings must not be located in a fire control centre but may be located in rooms accessed through the fire control centre.	Equipment within the Fire Control Room shall be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
S19C6: Ambient sound level of fire control centre [2019: Spec E1.8:5]	(1) The ambient sound level within the fire control centre measured when all fire safety equipment is operating in the manner in which it operates in an emergency must not exceed 65 dB(A). (2) The measurement must be taken for a sufficient time to characterise the effects of all sound sources. (3) Where there is not a great variation in noise level, a measurement time of 60 seconds may be used.	Ambient sound levels within the Fire Control Room shall be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
S19C7: Construction of a fire control room [2019: Spec E1.8:6]	A fire control centre in a building more than 50 m in effective height must be in a separate room where— (a) the enclosing construction is of concrete, masonry or the like, sufficiently impact resistant to withstand the impact of any likely falling debris, and with an FRL of not less than 120/120/120; and (b) any material used as a finish, surface, lining or the like within the room complies with the requirements of Specification 7; and (c) services, pipes, ducts and the like that are not directly required for the proper functioning of the fire control room do not pass through it; and (d) openings in the walls, floors or ceiling which separate the room from the interior of the building are confined to	The Fire Control Room has been provided with masonry / concrete walls that are capable of complying with this clause. Structural engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	doorways, ventilation and other openings for services necessary for the proper functioning of the facility.		
S19C8: Protection of openings in a fire control room [2019: Spec E1.8:7]	Openings permitted by S19C7 must be protected as follows: (a) Openings for windows, doorways, ventilation, service pipes, conduits and the like, in an external wall of the building that faces a road or open space, must be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4. (b) Openings in the floors, ceilings and internal walls enclosing a fire control room must, except for doorways, be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4. (c) A door opening in the internal walls enclosing a fire-control room, must be fitted with a self-closing –/120/30 smoke sealed fire door. (d) Openings associated with natural or mechanical ventilation must— (i) not be made in any ceiling or floor immediately above or below the fire control room; and (ii) be protected by a –/120/– fire damper if the opening is for a duct through a wall required to have an FRL, other than an external wall.	Protection of openings to the Fire Control Room shall be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
S19C9: Doors to a fire control room [2019: Spec E1.8:8]	(1) Required doors to a fire control room must open into the room, be lockable and located so that persons using escape routes from the building will not obstruct or hinder access to the room. (2) The fire control room must be accessible via two paths of travel— (a) one from the front entrance of the building; and	**A Fire Engineered Performance Solution is proposed to address where the Fire Control Room is not accessed from the "front entrance" of the building.**	**PS – Refer to Part 3.3 of Report**

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) one direct from a public place or fire-isolated passageway which leads to a public place and has a door with an FRL of not less than –/120/30.		
S19C10: Size and content of a fire control room [2019: Spec E1.8:9]	(1) A fire control room must contain— (a) a Fire Indicator Panel and necessary control switches and visual status indication for all required fire pumps, smoke control fans and other required fire safety equipment installed in the building; and (b) a telephone directly connected to an external telephone exchange; and (c) a blackboard or whiteboard not less than 1200 mm wide x 1000 mm high; and (d) a pin-up board not less than 1200 mm wide x 1000 mm high; and (e) a raked plan layout table of a size suitable for laying out the plans provided under (f); and (f) colour-coded, durable, tactical fire plans. (2) In addition, a fire control room may contain— (a) master emergency control panels, lift annunciator panels, remote switching controls for gas or electrical supplies and emergency generator backup; and (b) building security, surveillance and management systems if they are completely segregated from all other systems. (3) A fire control room must— (a) have a floor area of not less than 10 m^2 and the length of any internal side must be not less than 2.5 m; and (b) if only the minimum prescribed equipment is installed — have a net floor area of not less than 8 m^2	The Fire Control Room has a floor area of 11m2 and compliance with this clause is achievable. The contents of the Fire Control Room shall be provided in accordance with this clause. Fire services consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	with a clear space of not less than 1.5 m^2 in front of the Fire Indicator Panel; and (c) if additional equipment is installed — have an additional area of not less than 2 m^2 net floor area for each additional facility and a clear space of not less than 1.5 m^2 in front of each additional control or indicator panel; and (d) be constructed such that the area required for any path of travel through the room to other areas is provided in addition to the requirements (b) and (c).		
S19C11: Ventilation and power supply for a fire control room [2019: Spec E1.8:10]	(1) A fire control room must be ventilated by— (a) natural ventilation from a window or doorway in an external wall of the building which opens directly into the fire control room from a road or open space; or (b) a pressurisation system that only serves the fire control room, and— (i) is installed in accordance with AS 1668.1 as though the room is a fire-isolated stairway; and (ii) is activated automatically by operation of the fire alarm, or sprinkler system complying with Specification 17, installed in the building and manually by an over-riding control in the room; and (iii) provides a flow of fresh air through the room of not less than 30 air changes per hour when the system is operating and any door to the room is open; and (iv) has fans, motors and ductwork that form part of the system but not contained within the fire control room protected by enclosing construction with an FRL of not less than 120/120/120; and (v) has any electrical supply to the fire control room or equipment necessary for its operation	Ventilation and power supply for the Fire Control Room shall be provided in accordance with this clause. Fire services & mechanical consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	connected to the supply side of the main disconnection switch for the building. (2) No openable devices, other than necessary doorways, pressure controlled relief louvres and windows that are openable by a key, must be constructed in the fire control room.		
S19C12: Sign for a fire control room [2019: Spec E1.8:11]	The external face of the door to the fire control room must have a sign with the words— FIRE CONTROL ROOM in letters of not less than 50 mm high and of a colour which contrasts with that of the background.	Signage for the Fire Control Room shall be provided in accordance with this clause.	CRA – Refer Appendix F
S19C13: Lighting for a fire control room [2019: Spec E1.8:12]	Emergency lighting in accordance with the Deemed-to-Satisfy Provisions of Part E4 must be provided in a fire control room, except that an illumination level of not less than 400 lux must be maintained at the surface of the plan table.	Lighting to the Fire Control Room shall be provided in accordance with this clause. Electrical consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
Part E2 – Smoke Hazard Management			
E2D1: Deemed-to-Satisfy Provisions [2019:E2.0]	Informational	Noted	Noted
E2D2: Application of Part [2019: E2.1]	Informational	Noted	Noted

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
E2D3: General requirements [2019: E2.2]	(1) An air-handling system which does not form part of a smoke hazard management system in accordance with E2D4 to E2D20 and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must, subject to (2), be designed and installed— (a) to operate as a smoke control system in accordance with AS 1668.1; or (b) such that it— (i) incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and (ii) is arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1. (2) For the purposes of (1), each sole-occupancy unit in a Class 2 or 3 building is treated as a separate fire compartment. (3) Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with these Sections of the Standard. (4) A smoke detection system must be installed in accordance with S20C6 to operate AS 1668.1 systems that are provided for zone pressurisation and automatic air pressurisation for fire-isolated exits.	Compliance is achievable with the requirements of this clause. Smoke hazard management system specifications and certification shall be provided by the fire services/electrical engineer and Accredited Practitioner (Fire Safety).	CRA – Refer Appendix F
E2D4: Fire-isolated exits [2019: Table E2.2a]	(1) A part of a building listed in (2) must be provided with—	Stair pressurisation is required to be provided to all fire stairs.	**PS – Refer to Part 3.2 of Report**

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Clause	**Clause Requirements**	**Comment**	**Status**
	(a) an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1; or (b) open access ramps or balconies in accordance with D3D6. (2) The requirements of (1) apply to— (a) a required fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp serving— (i) any storey above an effective height of 25 m; or (ii) more than 2 below ground storeys, not counted in the rise in storeys in accordance with C2D3; or (iii) an atrium to which Part G3 applies; or (iv) a Class 9a building with a rise in storeys of more than 2; or (v) a Class 9c building with a rise in storeys of more than 2; or (vi) a Class 3 building used as a residential care building with a rise in storeys of more than 2; and (b) a required fire-isolated passageway or fire-isolated ramp with a length of travel more than 60 m to a road or open space. (3) An automatic air pressurisation system for a fire-isolated exit must serve the entire exit.	**To permit stair pressurisation to only be applied to the Forbes St basement fire stair in lieu of the entire exit.** Mechanical consultant to provide design certification demonstrating compliance with this clause.	
E2D5: Buildings more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building. [2019: Table E2.2a]	An automatic smoke detection and alarm system complying with Specification 20 must be provided to the following: (a) A Class 2 or 3 building which is more than 25 m in effective height. (b) A Class 2 or 3 part of a building, or a Class 4 part of a building, in a building which is more than 25 m in effective height.	An automatic smoke detection and alarm system is required to be provided in accordance with this clause. Electrical / Dry Fire consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
E2D6: Buildings more than 25m in effective height: Class 5, 6, 7b, 8 or 9b buildings [2019:E2.2a]	(1) A Class 5, 6, 7b, 8 or 9b building or part of a building must be provided with a zone pressurisation system between vertically separated fire compartments in accordance with AS 1668.1, if the building is more than 25 m in effective height. (2) The requirements of (1) do not apply to a building that has a fire compartment containing a Class 5, 6, 7b, 8 or 9b part (or a combination of these classes in the same fire compartment) where there is only one fire compartment containing these classifications in an otherwise Class 2, 3, 9a or 9c building. (3) For the purposes of (1), 'vertically separated fire compartments' are fire compartments above and below each other, and not fire compartments within the same storey.	**Zone pressurisation system is required to be provided to the Class 6, 7b & 8 parts of the building due to effective height being greater than 25m.** **Alternatively, a Fire Engineered Performance Solution can omit the requirement of zone pressurisation.**	**PS – Refer to Part 3.3 of Report**
E2D7: Buildings more than 25m in effective height: Class 9a buildings [2019:E2.2a]	NA	This clause is not applicable due to effective height and / or building classification.	NA
E2D8: Buildings not more than 25m in effective height: Class 2 and 3 buildings and class 4 part of a building [2019:E2.2a]	NA	This clause is not applicable due to effective height and / or building classification.	NA
E2D9: Buildings not more than 25m in effective height: Class 5, 6, 7b, 8 and 9b buildings [2019:E2.2a]	NA	This clause is not applicable due to effective height and / or building classification.	NA

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Clause	**Clause Requirements**	**Comment**	**Status**
NSW E2D10: Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4 [2019: NSW Table E2.2a]	NA	This clause is not applicable due to effective height and / or building classification.	NA
E2D11: Buildings not more than 25 m in effective height: Class 9a and 9c buildings [2019:E2.2a]	NA	This clause is not applicable due to effective height and / or building classification.	NA
E2D12: Class 7a Buildings [2019:E2.2a]	A Class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2, must comply with clause 5.5 of AS 1668.1.	A mechanical ventilation system in accordance AS 1668.2, must comply with clause 5.5 of AS 1668.1 is required to be provided to the Class 7a portions of the building. Mechanical consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
E2D13: Basements (other than Class 7a buildings) [2019:E2.2a]	(1) A basement, other than a Class 7a basement, not counted in the rise in storeys in accordance with C2D3, must— (a) comply with measures in accordance with this Part applicable to the building generally; and (b) where the basement has a total floor area of more than 2000 m^2, be provided with— (i) if not more than 2 below ground storeys— (A) a zone pressurisation system between vertically separated fire compartments in accordance with AS 1668.1, if the basement has more than one fire compartment; or (B) an automatic smoke detection and alarm system complying with Specification 20; or	This clause is not applicable due to effective height and / or building classification.	NA

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Clause	**Clause Requirements**	**Comment**	**Status**
	(C) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17; or (ii) if more than 2 below ground storeys, a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. (2) For the purposes of (1), 'vertically separated fire compartments' are fire compartments above and below each other, and not fire compartments within the same storey.		
E2D14: Class 6 buildings – in fire compartments more than 2000 m^2: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit) [2019:E2.2b]	(1) This clause applies to a Class 6 building not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit, except for— (a) a Class 6 sole-occupancy unit that— (i) has a floor area of not more than 2000 m^2; and (ii) is single storey with a main public entrance opening to a road or open space; and (iii) is separated from other parts of the fire compartment by construction, including openings, penetrations and junctions with other building elements, that prevents the free passage of smoke; and (b) parts of any other classification that are smoke separated from a Class 6 part by construction complying with (a)(iii). (2) Where the floor area of a Class 6 part of a fire compartment referred to in (1) is more than 2000 m^2, the fire compartment must be provided with— (a) an automatic smoke exhaust system complying with Specification 21; or	The Class 6 SOUs do not have a floor area more than 2000m2 and therefore, this clause is not applicable.	NA

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Clause	**Clause Requirements**	**Comment**	**Status**
	(b) if the building is single storey, automatic smoke-and-heat vents complying with Specification 22; or (c) if the floor area of the fire compartment is not more than 3500 m^2 and the building— (i) is single storey, an automatic smoke detection and alarm system complying with Specification 20; or (ii) has a rise in storeys of not more than 2, a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.		
E2D15: Class 6 buildings – in fire compartments more than 2000 m^2: Class 6 building (containing an enclosed common walkway or mall) [2019:E2.2b]	(1) This clause applies to a Class 6 building containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit, except for— (a) a Class 6 sole-occupancy unit that— (i) opens onto the enclosed common walkway or mall if the Class 6 sole-occupancy unit has a floor area of not more than 1000 m^2; or (ii) does not open onto the enclosed common walkway or mall if the Class 6 sole-occupancy unit— (A) has a floor area of not more than 2000 m^2; and (B) is single storey with a main entrance opening to a road or open space; and (C) is separated from other parts of the fire compartment by construction, including openings, penetrations and junctions with other building elements, that prevents the free passage of smoke; and	The Class 6 SOUs do not have a floor area more than 2000m2 and therefore, this clause is not applicable.	NA

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) parts of any other classification that are smoke separated from a Class 6 part by construction complying with (a)(ii)(C). (2) Where the floor area of a Class 6 part of a fire compartment referred to in (1) is more than 2000 m^2, the fire compartment, including the enclosed common walkway or mall, must be provided with— (a) an automatic smoke exhaust system complying with Specification 21; or (b) if the building is single storey, automatic smoke-and-heat vents complying with Specification 22; or (c) if the floor area of the fire compartment is not more than 3500 m^2 and the building has a rise in storeys of not more than 2, a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.		
NSW E2D16: Class 9b – assembly buildings: all [2019: NSW Table E2.2b]	NA	This clause is not applicable due to effective height and / or building classification.	NA
NSW E2D17: Class 9b – assembly buildings: night clubs, discotheques and the like [2019: NSW Table E2.2b]	NA	This clause is not applicable due to effective height and / or building classification.	NA
NSW E2D18: Class 9b – assembly buildings: exhibition halls, museums and art galleries [2019: NSW Table E2.2b]	NA	This clause is not applicable due to effective height and / or building classification.	NA
NSW E2D19: Class 9b – assembly buildings: other	NA	This clause is not applicable due to effective height and / or building classification.	NA

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
assembly buildings (not listed in NSW E2D16 to E2D18) [2019: NSW Table E2.2b]			
NSW E2D20: Class 9b assembly buildings	This clause has deliberately been left blank. E2D20 does not apply in NSW. This clause is deleted from the BCA in NSW, as requirements for Class 9b – Assembly buildings in NSW are covered under NSW E2D16 to NSW E2D19.	For noting.	NA
E2D21: Provisions for special hazards [2019: E2.3]	Additional smoke hazard management measures may be necessary due to the— (a) special characteristics of the building; or (b) special function or use of the building; or (c) special type or quantity of materials stored, displayed or used in a building; or (d) special mix of classifications within a building or fire compartment, which are not addressed in E2D4 to E2D20.	**The Fire Engineering Report shall address the following special hazards identified:** + **EV Charging** + **E-Bikes** + **Solar Panels**	**PS – Refer to Part 3.3 of report**

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
Specification 20 – Smoke Detection and Alarm System			
S20C1: Scope [2019: Spec E2.2a:1]	This Specification describes the installation and operation of automatic smoke detection and alarm systems.	Noted	Noted
S20C2: Type of system [2019: Spec E2.2a:2]	A required automatic smoke detection and alarm system must be provided in accordance with the following:	A S20C3, S20C4 or S205 system is required to be provided in accordance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(a) Class 2 buildings and Class 4 parts of a building— (i) a smoke alarm system complying with S20C3; or (ii) a smoke detection system complying with S20C4; or (iii) a combination of a smoke alarm system and a smoke detection system complying with S20C5. (b) Class 3 buildings— (c) Class 5, 6, 7, 8, 9b and 9c buildings — a smoke detection system complying with S20C4 (d) Class 9a health-care buildings— (i) where more than 6 bed patients are accommodated — a smoke detection system complying with S20C4; or (ii) where 6 or less bed patients are accommodated— (A) a smoke alarm system complying with S20C3; or (B) a smoke detection system complying with S20C4.	Electrical / Dry Fire consultant to provide design certification demonstrating compliance with this clause.	
S20C3: Smoke alarm system [2019: Spec E2.2a:3]	(1) In all Class 2 to 9 buildings provided with a smoke alarm system, the following applies: (a) A smoke alarm system must— (i) consist of smoke alarms complying with AS 3786; and (ii) be powered from the consumer mains source. (b) In kitchens and other areas where the use of the area is likely to result in smoke alarms causing spurious signals, subject to (c)— (i) any other alarm deemed suitable in accordance with AS 1670.1 may be installed provided that smoke alarms are installed elsewhere in the sole-	A S20C3, S20C4 or S205 system is required to be provided in accordance with this clause. Electrical / Dry Fire consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	occupancy unit in accordance with (2)(a) and (2)(b); or (ii) an alarm acknowledgement facility may be installed. (c) Where a kitchen or other area referred to in (b) is in a building protected with a sprinkler system complying with Specification 17 (other than a FPAA101D system), alarms need not be installed in the kitchen or other area likely to result in spurious signals. (2) In a Class 2 or 3 building or Class 4 part of a building provided with a smoke alarm system, the following applies: (a) Alarms must be installed within each sole-occupancy unit, and located on or near the ceiling in any storey— (i) containing bedrooms— (A) between each part of the sole-occupancy unit containing bedrooms and the remainder of the sole-occupancy unit; and (B) where bedrooms are served by a hallway, in that hallway; and (ii) not containing any bedrooms, in egress paths. (b) Where there is more than one alarm installed within a sole-occupancy unit, alarms must be interconnected within that sole-occupancy unit. (c) Subject to (d), alarms must be— (i) installed in public corridors and other internal public spaces, located in accordance with the requirements for smoke detectors in AS 1670.1; and (ii) connected to activate a building occupant warning system in accordance with S20C7.		

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(d) In a Class 2 or 3 building or Class 4 part of a building protected with a sprinkler system complying with Specification 17 (other than a FPAA101D system), alarms are not required in public corridors and other internal public spaces. (3) In a Class 9a building provided with a smoke alarm system, smoke alarms must be— (a) installed in every room, public corridor and other internal public space; and (b) located in accordance with the requirements for smoke detectors in AS 1670.1; and (c) interconnected to provide a common alarm; and (d) have manual call points installed in evacuation routes so that no point on a floor is more than 30 m from a manual call point.		
S20C4: Smoke detection system [2019: Spec E2.2a:4]	(1) In all Class 2 to 9 buildings provided with a smoke detection system, the following applies: (a) A smoke detection system must— (i) subject to (2), (3) and (4), comply with AS 1670.1; and (ii) activate a building occupant warning system in accordance with S20C7. (b) In kitchens and other areas where the use of the area is likely to result in smoke detectors causing spurious signals, subject to (c)— (i) any other detector deemed suitable in accordance with AS 1670.1 may be installed provided that smoke detectors are installed elsewhere in the sole-occupancy unit in accordance with the requirements for alarms in S20C3(2)(a) and (2)(b); or	A S20C3, S20C4 or S205 system is required to be provided in accordance with this clause. Electrical / Dry Fire consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) an alarm acknowledgement facility may be installed. (c) Where a kitchen or other area referred to in (b) is in a building protected with a sprinkler system complying with Specification 17 (other than a FPAA101D or FPAA101H system), detectors need not be installed in the kitchen or other areas likely to result in spurious signals. (2) In a Class 2 or 3 building or Class 4 part of a building provided with a smoke detection system, the following applies: (a) Smoke detectors must be installed— (i) within each sole-occupancy unit, in accordance with the requirements for alarms in S20C3(2)(a) and (2)(b); and (ii) subject to (b), in public corridors and other internal public spaces. (b) In a Class 2 or 3 building or Class 4 part of a building protected with a sprinkler system complying with Specification 17 (other than a FPAA101D or FPAA101H system), smoke detectors are not required in public corridors and other internal public spaces. (3) In a Class 9a health-care building provided with a smoke detection system, the following applies: (a) Except as provided in (b)— (i) photoelectric type smoke detectors must be installed in patient care areas and in paths of travel to exits from patient care areas; and (ii) in areas other than patient care areas and paths of travel to exits from patient care areas, where the use of the area is likely to result in smoke detectors causing spurious signals, any		

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Clause	**Clause Requirements**	**Comment**	**Status**
	other detector deemed suitable in accordance with AS 1670.1 may be installed in lieu of smoke detectors. (b) The requirements of (a) do not apply where an area is protected with a sprinkler system complying with Specification 17, smoke detectors need not be installed where the use of the area is likely to result in spurious signals. (c) Manual call points must be installed in evacuation routes so that no point on a floor is more than 30 m from a manual call point. (4) In a Class 9c building provided with a smoke detection system, the following applies: (a) remote automatic indication of each zone must be given in each smoke compartment by means of— (i) mimic panels with an illuminated display; or (ii) annunciator panels with alpha numeric display; and (b) if the building accommodates more than 20 residents, manual call points must be installed in paths of travel so that no point on a floor is more than 30 m from a manual call point.		
S20C5: Combined smoke alarm and smoke detection system [2019: Spec E2.2a:5]	(1) A Class 2 or 3 building or Class 4 part of a building provided with a combination of a smoke alarm system and smoke detection system in accordance with S20C2 must— (a) be provided with a smoke alarm system complying with S20C3 within sole-occupancy units; and (b) subject to (2), be provided with a smoke detection system complying with S20C4 in areas not within sole-occupancy units.	A S20C3, S20C4 or S205 system is required to be provided in accordance with this clause. Electrical / Dry Fire consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(2) In a Class 2 or 3 building or Class 4 part of a building protected with a sprinkler system complying with Specification 17 (other than a FPAA101D or FPAA101H system), smoke detectors are not required in public corridors and other internal public spaces.		
S20C6: Smoke detection for smoke control system [2019: Spec E2.2a:6]	(1) Smoke detectors required to activate air pressurisation systems for fire-isolated exits and zone pressurisation systems must— (a) be installed in accordance with AS 1670.1; and (b) have additional smoke detectors installed adjacent to each bank of lift landing doors set back horizontally from the door openings by a distance of not more than 3 m. (2) Smoke detectors required to activate— (a) automatic shutdown of air-handling systems in accordance with E2D16, E2D17 or E2D19; or (b) a smoke exhaust system in accordance with Specification 21, must comply with the requirements of (3). (3) Smoke detectors referred to in (2) must— (a) be spaced— (i) not more than 20 m apart and not more than 10 m from any wall, bulkhead or smoke curtain; and (ii) in enclosed malls and walkways in a Class 6 building not more than 15 m apart and not more than 7.5 m from any wall, bulkhead or curtain; and (b) have a sensitivity— (i) in accordance with AS 1670.1 in areas other than a multi-storey walkway and mall in a Class 6 building; and	A S20C6 system is required to be provided to activate the stair pressurisation system and / or zone pressurisation system. Electrical / Dry Fire consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) not exceeding 0.5% smoke obscuration per metre with compensation for external airborne contamination as necessary, in a multi-storey walkway and mall in a Class 6 building. (4) Smoke detectors provided to activate a smoke control system must— (a) either— (i) form part of a building fire or smoke detection system complying with AS 1670.1; or (ii) be a separate dedicated system incorporating control and indicating equipment complying with AS 1670.1; and (b) activate a building occupant warning system complying with S20C7, except that smoke detectors provided solely to initiate automatic shutdown of air-handling systems in accordance with (2)(a) need not activate a building occupant warning system.		
S20C7: Building occupant warning system [2019: Spec E2.2a:7]	Subject to E4D9, a building occupant warning system provided as part of a smoke hazard management system must comply with clause 3.22 of AS 1670.1 to sound through all occupied areas except— (a) in a Class 2 and 3 building or Class 4 part of a building provided with a smoke alarm system in accordance with S20C3(2)(c)— (i) the sound pressure level need not be measured within a sole-occupancy unit if a level of not less than 85 dB(A) is provided at the door providing access to the sole-occupancy unit; and (ii) the inbuilt sounders of the smoke alarms may be used to wholly or partially meet the requirements; and (b) in a Class 2 and 3 building or Class 4 part of a building provided with a smoke detection system in accordance with	A Building Occupant Warning System is required to be provided in accordance with this clause. Electrical / Dry Fire consultant to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	S20C4(2), the sound pressure level from a building occupant warning system need not be measured within a sole-occupancy unit if a level of not less than 100 dB(A) is provided at the door providing access to the sole-occupancy unit; and (c) in a Class 3 building used as a residential care building, the system— (d) in a Class 9a health-care building, in a patient care area, the system— (e) in a Class 9c building, the system—		
NSW S20C8: System Monitoring [2019: NSW Spec E2.2a:8]	The following installations must be connected to a fire alarm monitoring system connected to a fire station or fire station dispatch centre in accordance with AS 1670.3: (a) A smoke detection system in a Class 3 building provided in accordance with S20C2(b)(i) or S20C2(b)(ii). (b) A smoke detection system in a Class 9a health-care building, if the building accommodates more than 20 patients. (c) A smoke detection system in a Class 9c building. (d) Smoke detection in accordance with S20C6 provided to activate— (i) a smoke exhaust system in accordance with Specification 21; or (ii) smoke-and-heat vents in accordance with Specification 22.	System monitoring is not required to be provided to the subject building.	NA

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Clause	**Clause Requirements**	**Comment**	**Status**
Part E3 – Lift Installations			
E3.0: Deemed-to-Satisfy Provisions [2019: E3.0]	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements E3P1 to E3P4 are satisfied by complying with— (a) E3D2 to E3D12; and (b) for a building containing an occupiable outdoor area, Part G6; and (c) for public transport buildings, Part I2. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted	Noted
E3D2: Lift installations [2019: E3.1]	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification 24	The passenger lift must be provided in accordance with Specification 24. Vertical Transport consultant to provide a design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
E3D3: Stretcher facility in lifts [2019: E3.2]	(1) A stretcher facility in accordance with (2) must be provided— (a) in at least one emergency lift required by E3D5; or (b) where an emergency lift is not required, if passenger lifts are installed to serve any storey above an effective height of 12 m, in at least one of those lifts to serve each floor served by the lifts. (2) 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.	Due to the effective height of the building, it is required that the lifts are capable of providing stretcher facilities in accordance with this clause. Based on the plans it is noted that the proposed lift car dimensions would maintain a length of 2000mm as required. Vertical Transport consultant to provide a design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
E3D4: Warning against use of lifts in fire [2019: E3.3]	(1) A warning sign must be displayed where it can be readily seen near every call button for a passenger lift or group of lifts throughout a building. (2) The requirements of (1) do not apply to a small lift such as a dumb-waiter or the like that is for the transport of goods only. (3) Each warning sign required by (1) must comply with the details and dimensions of Figure E3D4 and consist of— (a) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or (b) letters incised or inlaid directly into the surface of the material forming the wall.	Suitable signage must be provided to the lift in accordance with this clause.	CRA – Refer Appendix F
E3D5: Emergency lifts [2019: E3.4]	(1) At least one emergency lift complying with (4) must be installed in— (a) a building which has an effective height of more than 25 m; and (b) a Class 9a building in which patient care areas are located at a level that does not have direct egress to a road or open space. (2) An emergency lift may be combined with a passenger lift and must serve those storeys served by the passenger lift so that all storeys of the building served by passenger lifts are served by at least one emergency lift. (3) Where two or more passenger lifts are installed and serve the same storeys, excluding a lift that is within an atrium and not contained wholly within a shaft— (a) at least two emergency lifts must be provided to serve those storeys; and (b) if located within different shafts, at least one emergency lift must be provided in each shaft.	Emergency lifts are required to be provide in accordance with this Clause. Forbes Street building lift is required to be an emergency lift. It should be noted only one lift is provided to service the Forbes street Both of Dowling Street building lifts are required to be an emergency lift and fire separation between these two lift shafts have been provided in accordance with this clause. **William Street West building lifts are required to be emergency lifts. Fire separation of FRL 120/120/120 between the lift shafts is required to be provided throughout the entire lift shaft.**	**FI – Refer to Part 3.1 of Report** **PS – Refer to Part 3.3 of Report**

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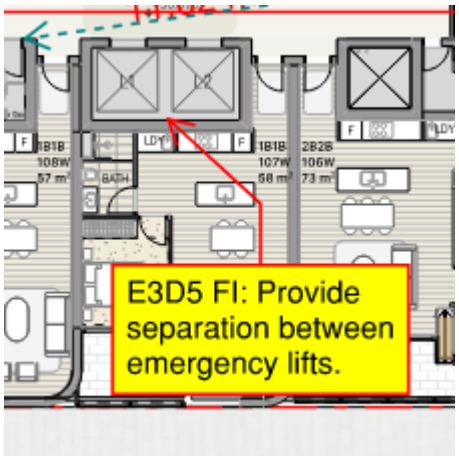
Clause	**Clause Requirements**	**Comment**	**Status**
	(4) An emergency lift must— (a) be contained within a fire-resisting shaft in accordance with C3D11; and (b) in a Class 9a building serving a patient care area— (i) have minimum dimensions, measured clear of all obstructions, including handrails, etc complying with Table E3D5; and (ii) be connected to a standby power supply system where installed; and (c) if the building has an effective height of more than 75 m, have a rating of at least— (i) 600 kg if not provided with a stretcher facility; or (ii) 900 kg if provided with a stretcher facility.	 William Street East has 3 lifts; L3, L4 & L5 with L5 being separated into its own lift shaft. Therefore, L5 and either L3 or L4 are required to be emergency lifts. Vertical Transport consultant to provide a design certification demonstrating compliance with this clause. **A Fire Engineered Performance Solution is required to address where the penthouse lifts are not proposed to be emergency lifts.**	
E3D6: Landings [2019: E3.5]	Access and egress to and from lift well landings must comply with the Deemed-to-Satisfy Provisions of Parts D2, D3 and D4.	Each of the lift landing are considered to allow for suitable access and egress in accordance with this clause.	CRA – Refer Appendix F
E3D7: Passenger lifts and their limitations [2019: E3.6]	(1) In an accessible building, every passenger lift must be one of the following lift types, subject to the limitations (if any) of each lift type:	Limitations Noted.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(a) There are no limitations on the use of electric passenger lifts, electrohydraulic passenger lifts or inclined lifts. (b) Stairway platform lifts must not— (i) be used to serve a space in a building accommodating more than 100 persons calculated according to D2D18; or (ii) be used in a high traffic public use area such as a theatre, cinema, auditorium, transport interchange, shopping centre or the like; or (iii) be used where it is possible to install another type of passenger lift; or (iv) connect more than 2 storeys; or (v) where more than 1 stairway lift is installed, serve more than 2 consecutive storeys; or (vi) when in the folded position, encroach on the minimum width of a stairway required by D2D8 to D2D11. (c) A low-rise platform lift must not travel more than 1000 mm. (d) A low-rise, low-speed constant pressure lift must not— (i) for an enclosed type, travel more than 4 m; or (ii) for an unenclosed type, travel more than 2 m; or (iii) be used in a high traffic public use areas in buildings such as a theatre, cinema, auditorium, transport interchange, shopping complex or the like. (e) A small-sized, low-speed automatic lift must not travel more than 12 m.		

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Clause	**Clause Requirements**	**Comment**	**Status**
	(2) A passenger lift referred to in (1) must not rely on a constant pressure device for its operation if the lift car is fully enclosed.		
E3D8: Accessible features required for passenger lifts [2019: TableE3.6a, Table E3.6b]	In an accessible building, every passenger lift must have the following features where applicable: (a) A handrail complying with the provisions for a mandatory handrail in AS 1735.12 for all lifts except— (i) a stairway platform lift; and (ii) a low-rise platform lift. (b) Lift floor dimensions of not less than 1400 mm wide x 1600 mm deep for all lifts which travel more than 12 m. (c) Lift floor dimensions of not less than 1100 mm wide x 1400 mm deep for all lifts which travel not more than 12 m, except a stairway platform lift. (d) Lift floor dimensions of not less than 810 mm wide x 1200 mm deep for a stairway platform lift. (e) Minimum clear door opening complying with AS 1735.12 for all lifts except a stairway platform lift. (f) Passenger protection system complying with AS 1735.12 for all lifts with power-operated doors. (g) Lift landing doors at the upper landing for all lifts except a stairway platform lift. (h) Lift car and landing control buttons complying with AS 1735.12 for all lifts except— (i) a stairway platform lift; and (ii) a low-rise platform lift. (i) Lighting in accordance with AS 1735.12 for all enclosed lift cars. (j) For all lifts serving more than 2 levels—	Refer to separate Access Assessment Report for an assessment on this clause.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	(i) automatic audible information within the lift car to identify the level each time the car stops; and (ii) audible and visual indication at each lift landing to indicate the arrival of the lift car; and (iii) audible information and audible indication required by (i) and (ii) is to be provided in a range of between 20 - 80 dB(A) at a maximum frequency of 1500 Hz. (k) Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received, for all lifts except a stairway platform lift.		
E3D9: Fire service controls [2019: E3.7]	Where lifts serve any storey above an effective height of 12 m, the following must be provided: (a) A fire service recall control switch complying with E3D11 for— (i) a group of lifts; or (ii) a single lift not in a group that serves the storey. (b) A lift car fire service drive control switch complying with E3D12 for every lift.	Fire service recall control switch shall be provided in accordance with this clause. Vertical Transport consultant to provide a design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
E3D10: Residential care buildings [2019: E3.8]	NA	This clause is not applicable due to building classification.	NA
E3D11: Fire service recall control switch [2019: E3.9]	(1) Each group of lifts must be provided with one fire service recall control switch required by E3D9 that activates the fire service recall operation at (6). (2) The switch required by (1) must— (a) be located at the landing nominated by the appropriate authority; and (b) be labelled “FIRE SERVICE” in indelible white lettering on a red background; and	Fire service recall control switch shall be provided in accordance with this clause. Vertical Transport consultant to provide a design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	(c) have two positions with an “OFF” and an “ON” position identified; and (d) be operable only by the use of a key that is removable in either the “OFF” position or the “ON” position. (3) Adhesive labels must not be used for compliance with (2)(b) and (c). (4) The key in (2)(d) must be able to turn all fire service recall control switches in the building and must have a different key combination to other keys used for lifts in the building. (5) The fire service recall operation must be activated by— (a) switching the fire service recall control switch in (1) to “ON”; or (b) a signal from a fire management system approved by the appropriate authority. (6) The activation of the fire service recall operation at (5) must— (a) cancel all registered car and landing calls; and (b) inactivate all door reopening devices that may be affected by smoke; and (c) ensure lift cars travelling toward the nominated floor continue to the nominated floor without stopping; and (d) ensure lift cars travelling away from the nominated floor stop at or before the next available floor without opening the doors (either automatically or by the door open button), reverse direction and travel without stopping to the nominated floor; and (e) for lifts stopped at a floor other than the nominated floor, close the doors and travel without stopping to the nominated floor; and		

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Clause	**Clause Requirements**	**Comment**	**Status**
	(f) ensure that lifts stay at the nominated floor with doors open; and (g) permit all lifts to return to normal service if the fire service recall control switch at (1) is switched to the “OFF” position during or after the fire service recall operation. (7) The requirements of (6) do not apply to lifts on inspection service or when the lift car fire service control switch required by E3D12 is in the "ON" position. (8) Lifts having manual controls must signal an alert to the lift for the lift to return to the nominated floor containing the recall switch that activated the signal.		
E3D12: Lift car fire service drive control switch [2019: E3.10]	(1) The lift car fire service drive control switch required by E3D9 must be activated from within the lift car. (2) The switch must— (a) be located between 600 mm and 1500 mm above the lift car floor; and (b) be labelled “FIRE SERVICE” by indelible white lettering on a red background; and (c) have two positions with an “OFF” and an “ON” position identified; and (d) operate only by the use of a key that is removable in either the “OFF” position or the “ON” position. (3) Adhesive labels must not be used for compliance with (2)(b) or (c). (4) When the lift car fire service drive control switch at (1) is turned to the "ON" position, the lift must— (a) not respond to the fire service recall control switch; and (b) cancel all registered lift car and landing calls; and	Lift care service drive control switch shall be provided in accordance with this clause. Vertical Transport consultant to provide a design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	(c) override all lift car call access control systems; and (d) inactivate all door reopening devices that may be affected by smoke; and (e) allow the registration of lift car call by lift car call buttons, however the lift doors must not close in response to the registration of lift car calls; and (f) activate door closing by constant pressure being applied on the “door close” button unless the button is released before the doors are fully closed, in which case the doors must reopen and any registered lift car calls must be cancelled; and (g) when the doors are closed, move the lift in response to registered lift car calls while allowing additional lift car calls to also be registered; and (h) travel to the first possible floor in response to registered lift car calls and cancel all registered lift car calls after the lift stops; and (i) ensure doors do not open automatically, rather by constant pressure being applied on the “door open” button unless the button is released before the doors are fully open, in which case the doors must re-close. (5) The requirements of (4) do not apply to a lift operating on inspection service. (6) A multi-deck lift installation must have systems in place that— (a) are able to communicate to the fire officer that the fire service drive control switch will not operate until all decks have been cleared of passengers; and (b) ensure there is an appropriate method of clearing all deck landings of passengers; and		

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Clause	**Clause Requirements**	**Comment**	**Status**
	(c) maintain all doors to deck landings not containing the fire service control switch closed and inoperative while the lift is on fire service drive control.		

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Clause	**Clause Requirements**	**Comment**	**Status**
Specification 24 – Lift Installations			
S24C1: Scope [2019: Spec E3.1:1]	This Specification contains requirements for electric passenger lift installations and electrohydraulic passenger lift installations.	Noted	Noted
S24C2: Lift cars exposed to solar radiation [2019: Spec E3.1:2]	(1) A lift car exposed to solar radiation directly, or indirectly by re-radiation, must have— (a) mechanical ventilation at a rate of one air change per minute; or (b) mechanical cooling. (2) A 2 hour alternative power source for ventilation or mechanical cooling at (1) must be provided in the event of normal power loss.	The lift car is not exposed to solar radiation and therefore, this clause is not applicable.	CRA – Refer Appendix F
S24C3: Lift car emergency lighting [2019: Spec E3.1:3]	A lift car must have an emergency lighting system designed— (a) to come on automatically upon failure of the normal lighting supply; and (b) to provide at least 20 lux of lighting for 2 hours on the alarm initiation button.	Emergency lighting system must be designed in accordance with this clause.	CRA – Refer Appendix F
S24C4: Cooling of lift shaft	While a lift in a lift shaft is in service, the cooling of the lift shaft must—	The lift shaft must be provided with a cooling system in accordance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
[2019: Spec E3.1:4]	(a) ensure that the dry bulb air temperature in the lift shaft does not exceed 40°C; and (b) if the cooling is by a ventilation system, be provided with an air change rate determined using a temperature rise of no more than 5 K..		
S24C5: Lift foyer access [2019: Spec E3.1:5]	Where there is a security foyer in a building, access may be via locked security doors provided— (a) security doors revert to the unlocked state in the event of— (i) power failure; or (ii) fire alarm; and (b) locked foyer areas are monitored by closed circuit television and intercom system to a 24 hour staffed location.	The lifts are located within a security foyer and therefore, the security doors must revert to an unlocked state in the event of a power failure or fire alarm. 24hr CCTV must be provided to the foyer area.	CRA – Refer Appendix F
S24C6: Emergency access doors in a single enclosed lift shaft [2019: Spec E3.1:6]	(1) Where a lift is installed in a single enclosed lift shaft having a distance between normal landing entrances greater than 12.2 m, emergency access doors must be provided and constructed as follows: (a) The clear opening size of emergency doors must be not less than 600 mm wide x 980 mm high. (b) Hinged doors must not open towards the interior of the lift shaft. (c) Doors must be self-closing and self-locking. (d) Doors must be marked on the landing side with the letters not less than 35 mm high: DANGER LIFTWELL ACCESS KEEP FURNITURE AND FIXTURES CLEAR (e) Doors from the landing side must only be openable by a tool.	The lift does not travel more than 12.2m between landings and therefore, this clause is not applicable.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(f) Each emergency door must be provided with a positive breaking electrical contact, wired into the control circuit to prevent movement of the lift until the emergency door is both closed and locked. (2) Emergency egress from the lift car must be provided in single enclosed lift shafts where— (a) ropes are installed; and (b) the vertical distance between the lift car sill and the landing door head is less than 600 mm; and (c) the counterweight is resting on its fully compressed buffer. (3) Emergency egress required by (2) must be in the form of an interlocked door with clear opening dimensions not less than 600 mm x 600 mm, accessible from the lift car entrance or the lift car roof (where the door is located in the wall of the lift shaft).		

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
Part E4 – Visibility In An Emergency, Exit Signs And Warning Systems			
E4D1: Deemed-to-Satisfy Provisions [2019: E4.0]	Informational	Noted	Noted
E4D2: Emergency lighting requirements [2019: E4.2]	An emergency lighting system must be installed— (a) in every fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; and (b) in every storey of a Class 5, 6, 7, 8 or 9 building where the storey has an area more than 300 m^2— (i) in every passageway, corridor, hallway, or the like, that is part of the path of travel to an exit; and (ii) in any room having a floor area more than 100 m^2 that does not open to a corridor or space that has emergency lighting or to a road or open space; and (iii) in any room having a floor area more than 300 m^2; and (c) in every passageway, corridor, hallway, or the like, having a length of more than 6 m from the entrance doorway of any sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building to the nearest doorway opening directly to— (i) a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or (ii) an external stairway serving instead of a fire-isolated stairway under D2D13; or (iii) an external balcony leading to a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or (iv) a road or open space; and	An emergency lighting system must be designed and installed in accordance with this clause. Electrical engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
	(d) in every required non-fire-isolated stairway; and (e) in a sole-occupancy unit in a Class 5, 6 or 9 building if— (i) the floor area of the unit is more than 300 m^2; and (ii) an exit from the unit does not open to a road or open space or to an external stairway, passageway, balcony or ramp, leading directly to a road or open space; and (f) in every room or space to which there is public access in every storey in a Class 6 or 9b building if— (i) the floor area in that storey is more than 300 m^2; or (ii) any point on the floor of that storey is more than 20 m from the nearest doorway leading directly to a stairway, ramp, passageway, road or open space; or (iii) egress from that storey involves a vertical rise within the building of more than 1.5 m, or any vertical rise if the storey concerned does not admit sufficient light; or (iv) the storey provides a path of travel from any other storey required by (i), (ii) or (iii) to have emergency lighting; and (g) in a Class 9a health-care building— (i) in every passageway, corridor, hallway, or the like, serving a treatment area or a ward area; and (ii) in every room having a floor area of more than 120 m^2 in a patient care area; and (h) in every Class 9c building excluding within sole-occupancy units; and (i) in every required fire control centre.		
E4D3: Measurement of distance [2019: E4.3]	Informational	Noted	Noted

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
E4D4: Design and operation of emergency lighting [2019: E4.4]	Every required emergency lighting system must comply with AS/NZS 2293.1.	An emergency lighting system must be designed and installed in accordance with this clause. Electrical engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
E4D5: Exit signs [2019: E4.5]	An exit sign must be clearly visible to persons approaching the exit, and must be installed on, above or adjacent to each— (a) door providing direct egress from a storey to— (i) an enclosed stairway, passageway or ramp serving as a required exit; and (ii) an external stairway, passageway or ramp serving as a required exit; and (iii) an external access balcony leading to a required exit; and (b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and (c) horizontal exit; and (d) door serving as, or forming part of, a required exit in a storey required to be provided with emergency lighting in accordance with E4D2.	Exit Signage must be designed and installed in accordance with this clause. Electrical engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
NSW E4D6: Direction signs [2019: NSW E4.6]	If an exit is not readily apparent to persons occupying or visiting the building, then exit signs must be installed— (a) in appropriate positions in corridors, hallways, lobbies, foyers, auditoria, and the like, indicating the direction to a required exit; and (b) in a Class 9b building used as an entertainment venue — in any external egress path to a road where the exit does not open directly onto a road.	Where directional signage is installed, they must be installed in accordance with this clause. Electrical engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section E: Services and Equipment			
Clause	**Clause Requirements**	**Comment**	**Status**
E4D7: Class 2 and 3 buildings and Class 4 Parts: Exemptions [2019: E4.7]	Informational	Noted	Noted
E4D8: Design and operation of exit signs [2019: E4.8]	Every required exit sign must— (a) comply with— (i) AS/NZS 2293.1; or (ii) for a photoluminescent exit sign, Specification 25; and (b) be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.	Exit signage to comply with this clause & AS2293.1 Electrical engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
E4D9: Emergency warning and intercom systems [2019: E4.9]	An emergency warning and intercom system complying, where applicable, with AS 1670.4 must be installed— (a) in a building with an effective height of more than 25 m; and (b) in a Class 3 building having a rise in storeys of more than 2 and used as— (c) in a Class 3 building used as a residential care building, except that the system— (d) in a Class 9a building having a floor area of more than 1000 m^2 or a rise in storeys of more than 2, and the system— (e) in a Class 9b building—	EWIS is required to be provided due to effective height greater than 25m. Electrical engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section F: Health and amenity

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
Part F1 – Surface water management, rising damp and external waterproofing			
F1D1: Deemed-to-Satisfy Provisions [2019: F1.0]	(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	For noting.	Noted
F1D2: Application of part [New for 2022]	(1) F1D4 and F1D5 do not apply to a roof with a covering complying with F3D2(a) to (d). (2) F1D3 to F1D5 do not apply to a balcony, podium or similar horizontal surface part of a building— (a) where the flooring is of timber decking or other perforated flooring; or (b) which is located directly above ground.	For noting.	Noted
F1D3: Stormwater drainage [2019: F1.1]	Stormwater drainage must be designed and constructed in accordance with AS/NZS 3500.3.	Stormwater drainage will need to be provided in accordance with this clause.	CRA – Refer Appendix F
F1D4: Exposed joints [New for 2022]	Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must— (a) be protected in accordance with Section 2.9 of AS 4654.2; and (b) not be located beneath or run through a planter box, water feature or similar part of the building.	Exposed joints in the drainage surfaces will need to be provided in accordance with this clause.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
F1D5: External above ground membranes [2019: F1.4]	A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane— (a) consisting of materials complying with AS 4654.1; and (b) designed and installed in accordance with AS 4654.2.	Waterproofing membranes will need to be provided in accordance with this clause. Any location where there is a level threshold to allow for accessible entry into the building a grated strip drain will need to be provided to the doorway in accordance with AS 4654 Parts 1 and 2:2012. In particular where balconies have a level threshold to the internal areas of the unit, strip drains will be required. Further details to be provided at CC Stage.	CRA – Refer Appendix F
F1D6: Damp-proofing [2019: F1.9]	(1) Except for a building covered by (3), moisture from the ground must be prevented from reaching— (a) the lowest floor timbers and the walls above the lowest floor joists; and (b) the walls above the damp-proof course; and (c) the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders. (2) Where a damp-proof course is provided, it must consist of— (a) a material that complies with AS/NZS 2904; or (b) impervious sheet material in accordance with AS 3660.1. (3) The following buildings need not comply with (1): (a) A Class 7 or 8 building where in the particular case there is no necessity for compliance. (b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes. (c) An open spectator stand or open-deck carpark.	Damp proofing will need to be provided in accordance with this clause.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
F1D7: Damp-proofing of floors on the ground [2019: F1.10]	(1) If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870. (2) The requirements of (1) do not apply where— (a) weatherproofing is not required; or (b) the floor is the base of a stair, lift or similar shaft which is adequately drained by gravitation or mechanical means.	Damp proofing will need to be provided in accordance with this clause.	CRA – Refer Appendix F
F1D8: Subfloor Ventilation [F1.12 of BCA 2019]	NA	There is no subfloor space and therefore, this clause is not applicable.	NA
Part F2 – Wet areas and overflow protection			
F2D1: Deemed-to-satisfy Provisions [New for 2022]	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance RequirementsF2P1 and F2P2 are satisfied by complying with F2D2 to F2D4. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	For noting.	Noted
F2D2: Wet area construction [2019: F1.7]	(1) In a Class 2 and 3 building and a Class 4 part of a building, building elements in wet areas must— (a) be water resistant or waterproof in accordance with Specification 26; and (b) comply with AS 3740. (2) In a Class 5, 6, 7, 8 or 9 building, building elements in a bathroom or shower room, a slop hopper or sink compartment, a laundry or sanitary compartment must— (a) be water resistant or waterproof in accordance with Specification 26; and	Wet areas will need to be provided in accordance with this clause.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) comply with AS 3740, as if they were in a Class 2 or 3 building or a Class 4 part of a building.		
F2D3: Rooms containing urinals [2019: F1.7]	(1) Where a slab or stall type urinal is installed— (a) the floor surface of the room containing the urinal must be an impervious material; and (i) where no step is installed, must— (A) be graded to the urinal channel for a distance of 1.5 m from the urinal channel; and (B) have the remainder of the floor graded to a floor waste; and (ii) where a step is installed— (A) the step must have an impervious surface and be graded to the urinal channel; and (B) the floor behind the step must be graded to a floor waste; and (b) the junction between the floor surface and the urinal channel must be impervious. (2) Where a wall hung urinal is installed— (a) the wall must be surfaced with impervious material extending from the floor to not less than 50 mm above the top of the urinal and not less than 225 mm on each side of the urinal; and (b) the floor must be surfaced with an impervious material and be graded to a floor waste. (3) In a room with timber or steel-framed walls and containing a urinal— (a) the wall must be surfaced with an impervious material extending from the floor to not less than 100 mm above the floor surface; and	Where urinals are installed, they shall be provided in accordance with this clause.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) the junction of the floor surface and the wall surface must be impervious.		
F2D4: Floor wastes [2019: F1.11]	(1) In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above a sole-occupancy unit or public space must have a floor waste. (2) Where a floor waste is installed— (a) the minimum continuous fall of a floor plane to the waste must be 1:80; and (b) the maximum continuous fall of a floor plane to the waste must be 1:50.	Floor wastes will need to be provided in accordance with this Clause.	CRA – Refer Appendix F
Part F3 – Roof and wall cladding			
F3D1: Deemed-to-satisfy provisions [New for 2022]	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirement F3P1 is satisfied by complying with F3D2 to F3D5. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable	Informative	Noted
F3D2: Roof coverings [2019: F1.5]	A roof must be covered with— (a) roof tiles complying with AS 2049, fixed in accordance with AS 2050; or (b) metal sheet roofing complying with AS 1562.1; or (c) plastic sheet roofing designed and installed in accordance with AS 1562.3; or (d) terracotta, fibre-cement and timber slates and shingles designed and installed in accordance with AS 4597, except in cyclonic areas; or (e) an external waterproofing membrane complying with F1D5.	The roof coverings will need to be provided in accordance with this clause.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
F3D3: Sarking [2019: F1.6]	Sarking-type material used for weatherproofing of roofs and walls must comply with AS 4200.1 and AS 4200.2.	Sarking will need to be provided in accordance with this clause.	CRA – Refer Appendix F
F3D4: Glazed Assemblies [2019: F1.13]	(1) Subject to (2) and (3), the following glazed assemblies in an external wall, must comply with AS 2047 requirements for resistance to water penetration: (a) Windows. (b) Sliding and swinging glazed doors with a frame, including French and bi-fold doors with a frame. (c) Adjustable louvres. (d) Shopfronts. (e) Window walls with one piece framing. (2) The following buildings need not comply with (1): (a) A Class 7 or 8 building where in the particular case there is no necessity for compliance. (b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, sanitary compartment or the like contributes to the weatherproofing of the other part of the building. (c) An open spectator stand or open-deck carpark. (3) The following glazed assemblies need not comply with (1): (a) All glazed assemblies not in an external wall. (b) Revolving doors. (c) Fixed louvres. (d) Skylights, roof lights and windows in other than the vertical plane. (e) Sliding and swinging glazed doors without a frame.	The glazed assemblies will need to be provided in accordance with this clause.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(f) Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047. (g) Second-hand windows, re-used windows and recycled windows. (h) Heritage windows.		
F3D5: Wall Cladding [New for 2022]	(1) External wall cladding must comply with one or a combination of the following: (a) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700. (b) Autoclaved aerated concrete: AS 5146.3. (c) Metal wall cladding: AS 1562.1. (2) The following buildings need not comply with (1): (a) A Class 7 or 8 building where in the particular case there is no necessity for compliance. (b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, sanitary compartment or the like contributes to the weatherproofing of another part of the building that is required to be weatherproofed. (c) An open spectator stand or open deck carpark.	**External wall cladding will need to be provided in accordance with this Clause. Otherwise, a Performance solution will need to be sought.**	**PS – Refer to Part 3.3 of Report**
Part F4 – Sanitary and Other Facilities			
F4D1: Deemed-to-Satisfy Provisions [2019: F2.0]	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance RequirementsF4P1 to F4P6 are satisfied by complying with— (a) F4D2 to F4D12; and (b) for public transport buildings, Part I2; and	Noted	Noted

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(c) for farm sheds, Part I3. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.		
F4D2: Facilities in residential buildings (including Table F2.1) [2019: F2.1]	(1) For facilities in Class 2 buildings, the following applies: (a) Within each sole-occupancy unit, provide— (i) a kitchen sink and facilities for the preparation and cooking of food; and (ii) a bath or shower; and (iii) a closet pan; and (iv) a washbasin. (b) For laundry facilities, provide either— (i) in each sole-occupancy unit— (A) clothes washing facilities, comprising at least one washtub and a space for a washing machine; and (B) clothes drying facilities comprising clothes line or a hoist with not less than 7.5 m of line, or space for one heat operated drying cabinet or appliance in the same room as the clothes washing facilities; or (ii) a separate laundry for each 4 sole-occupancy units, or part thereof, that must comprise— (A) clothes washing facilities, comprising at least one washtub and a space for a washing machine; and (B) clothes drying facilities comprising clothes line or a hoist with not less than 7.5 m of line per sole-occupancy unit, or space for one heat operated drying cabinet or appliance.	The required facilities for a Class 2 building have been provided.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(c) For the purposes of (a) and (b), a kitchen sink or washbasin must not be counted as a laundry washtub.		
F4D3: Calculation of number of occupants and facilities [2019: F2.2]	(1) The number of persons accommodated must be calculated according to D2D18 if it cannot be more accurately determined by other means. (2) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females. (3) In calculating the number of sanitary facilities to be provided under F4D2 and F4D4, a unisex facility required for people with a disability (other than a facility provided under F4D12) may be counted once for each sex. (4) For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary products.	For noting.	CRA – Refer Appendix F
F4D4: Facilities in Class 3 to 9 buildings [2019: F2.3]	(1) Except where permitted by (3), (4), (7), F4D5(a), F4D5(b) and F4D12(1), separate sanitary facilities for males and females must be provided for Class 3, 5, 6, 7, 8 or 9 buildings in accordance with Tables F4D4a, F4D4b, F4D4c, F4D4d, F4D4e, F4D4f, F4D4g, F4D4h, F4D4i, F4D4j, F4D4k and F4D4l, as appropriate. (2) In Tables F4D4a, F4D4b, F4D4c, F4D4d, F4D4e, F4D4f, F4D4g, F4D4h, F4D4i, F4D4j, F4D4k and F4D4l— (a) 'Number' means the number of facilities required; and (b) '>' means greater than; and (c) a hyphen means no data (refer to the row above for the highest value applicable); and (d) 'N/A' means not applicable; and (e) a reference to—	No information on population numbers have been provided by the client and therefore an assessment of expected population has been done in accordance with Table D2D18. A central sanitary facility bank is proposed to the Plaza level however no details on the number of sanitary facilities have been provided. **Refer to section 3.1 of this report for the required sanitary facilities.**	**FI – Refer to Part 3.1 of Report**

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(i) 'employees' includes owners and managers using the building; and (ii) 'add 1 per 100 or 150, 250, 500, etc.' includes any part thereof of that number. (3) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex. (4) If the majority of employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy. (5) Employees and the public may share the same facilities in a Class 6 and 9b building (other than a school or early childhood centre) provided the number of facilities provided is not less than the total number of facilities required for employees plus those required for the public. (6) Adequate means of disposal of sanitary products must be provided in sanitary facilities for use by females. (7) Separate sanitary facilities for males and females need not be provided for patients in a ward area of a Class 9a building. (8) A Class 9a health-care building must be provided with— (9) A Class 9b early childhood centre must be provided with— (10) Class 9b theatres and sporting venues must be provided with one shower for each 10 participants or part thereof. (11) Not less than one washbasin must be provided where closet pans or urinals are provided.		
F4D5: Accessible sanitary facilities (including Table F2.4)	In a building required to be accessible—	Refer to separate Access assessment report.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
[2019: F2.4]	(a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with F4D6; and (b) accessible unisex showers must be provided in accordance with F4D7; and (c) at each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, not less than one sanitary compartment suitable for a person with an ambulant disability for use by males and not less than one sanitary compartment suitable for a person with an ambulant disability for use by females, each in accordance with AS 1428.1, must be provided; and (d) an accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary products; and (e) the circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with F4D6 and F4D7 must comply with the requirements of AS 1428.1; and (f) an accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and (g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and (h) where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations; and (i) an accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey		

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	or level that is not required by D4D4(f) to be provided with a passenger lift or ramp complying with AS 1428.1.		
F4D6: Accessible unisex sanitary compartments [2019: Table F2.4a]	(1) Where required by F4D5(a), the minimum number of accessible unisex sanitary compartments for each class of building is as follows: (a) For a Class 1b building— (i) not less than 1; and (ii) where private accessible unisex sanitary compartments are provided for every accessible bedroom, common accessible unisex sanitary compartments need not be provided. (b) For a Class 2 building, where sanitary compartments are provided in common areas, not less than 1. (c) For Class 3 and Class 9c buildings— (i) in every accessible sole-occupancy unit provided with sanitary compartments within the accessible sole-occupancy unit, not less than 1; and (ii) at each bank of sanitary compartments containing male and female sanitary compartments provided in common areas, not less than 1. (d) For Class 5, 6, 7, 8 or 9 buildings, where F4D4 requires closet pans— (i) 1 on every storey containing sanitary compartments; and (ii) where a storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks.	Refer to separate Access assessment report.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(e) For a Class 10a building, at each bank of sanitary compartments containing male and female sanitary compartments, not less than 1. (2) The requirements of (1)(d) do not apply within a ward area of a Class 9a health-care building. (3) The requirements of (1)(e) do not apply to— (a) a Class 10a appurtenant to another class of building; or (b) a sanitary compartment dedicated to a single caravan/camping site.		
F4D7: Accessible unisex showers [2019: Table F2.4(b)]	(1) Where required by F4D5(b), the minimum number of accessible unisex showers for each class of building is as follows: (a) For a Class 1b building— (i) not less than 1; and (ii) where private accessible unisex showers are provided for every accessible bedroom, common accessible unisex showers need not be provided. (b) For a Class 2 building, where showers are provided in common areas, not less than 1. (c) For Class 3 and 9c buildings— (i) in every accessible sole-occupancy unit provided with showers within the accessible sole-occupancy unit, not less than 1; and (ii) 1 for every 10 showers or part thereof provided in common areas. (d) For Class 5, 6, 7, 8 or 9 buildings, where F4D4 requires 1 or more showers, not less than 1 for every 10 showers or part thereof.	Refer to separate Access assessment report.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(e) For a Class 10a building, where showers are provided, 1 for every 10 showers or part thereof. (2) The requirements of (1)(d) do not apply within a ward area of a Class 9a health-care building. (3) The requirements of (1)(e) do not apply to— (a) a Class 10a appurtenant to another class of building; and (b) a sanitary compartment dedicated to a single caravan/camping site.		
F4D8: Construction of sanitary compartments [2019: F2.5]	(1) Other than in an early childhood centre, sanitary compartments must have doors and partitions that separate adjacent compartments and extend— (a) from floor level to the ceiling in the case of a unisex facility; or (b) to a height of not less than 1.5 m above the floor if primary school children are the principal users; or (c) 1.8 m above the floor in all other cases. (2) Unless there is a clear space of at least 1.2 m, measured in accordance with Figure F4D8, between the closet pan within the sanitary compartment and the doorway, the door to a fully enclosed sanitary compartment must— (a) open outwards; or (b) slide; or (c) be readily removable from the outside of the sanitary compartment. (3) In an early childhood centre, facilities for use by children must have each sanitary compartment screened by a partition which, except for the doorway, is opaque for a height of at least 900 mm but not more than 1200 mm above the floor level.	The doorways to the sanitary compartments are required to be provided in accordance with this Clause. Where the 1.2m clearance is not provided, it would be required to provide lift off hinges in accordance with this Clause.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
F4D9: Interpretation: urinals and washbasins [2019: F2.6]	(1) A urinal may be— (a) an individual stall or wall-hung urinal; or (b) each 600 mm length of a continuous urinal trough; or (c) a closet pan used in place of a urinal. (2) A washbasin may be— (a) an individual basin; or (b) a part of a hand washing trough served by a single water tap.	For noting.	Noted
NSW F4D10: Microbial (legionella) control	This clause has deliberately been left blank. F4D10 does not apply in NSW as the installation of hot water, warm water and cooling water systems (and their operation and maintenance) is regulated in the Public Health Regulation 2012, under the Public Health Act 2010.	For noting.	Noted
F4D11: Waste Management [2019: F2.8]	(1) In a Class 9a health-care building, at least one slop-hopper or other device, other than a water closet pan or urinal, must be provided— (2) In a Class 9c building, the following facilities must be provided for every 60 beds or part thereof on each storey containing resident use areas:	This clause is not applicable to the subject building due to building classification.	CRA – Refer Appendix F
F4D12: Accessible adult change facilities [2019: F2.9]	(1) One unisex accessible adult change facility must be provided in an accessible part of a— (a) Class 6 building that is a shopping centre having a design occupancy of not less than 3,500 people, calculated on the basis of the floor area and containing a minimum of 2 sole-occupancy units; and (b) Class 9b sports venue or the like that—	Refer to separate Access assessment report.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(i) has a design occupancy of not less than 35,000 spectators; or (ii) contains a swimming pool that has a perimeter of not less than 70 m and that is required by D4D2 to be accessible; and (c) museum, art gallery or the like having a design occupancy of not less than 1,500 patrons; and (d) theatre or the like having a design occupancy of not less than 1,500 patrons; and (e) passenger use area of an airport terminal building within an airport that accepts domestic and/or international flights that are public transport services as defined in the Disability Standards for Accessible Public Transport 2002. (2) Accessible adult change facilities required by (1)— (a) must be constructed in accordance with Specification 27; and (b) cannot be combined with another sanitary compartment. (3) For the purposes of (1), design occupancy must be calculated in accordance with D2D18, but excluding any area that— (a) can only be accessed by staff, employees, contractors, maintenance personnel and the like; or (b) is subject to an exemption under D4D5.		

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Clause	**Clause Requirements**	**Comment**	**Status**
Part F5 – Room Heights			
F5D1: Deemed-to-Satisfy Provisions [2019: F3.0]	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance RequirementF5P1 is satisfied by complying with— (a) F5D2; and (b) for farm sheds, Part I3. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted	Noted
F5D2: Height of rooms and other spaces [2019: F3.1]	(1) The height of rooms and other spaces in a Class 2 or 3 building or Class 4 part of a building must be not less than— (a) for a kitchen, laundry, or the like — 2.1 m; and (b) for a corridor, passageway or the like — 2.1 m; and (c) for a habitable room excluding a kitchen — 2.4 m; and (d) in a habitable room, or space within a habitable room, with a sloping ceiling or projections below the ceiling line— (i) in an attic — a height of not less than 2.2 m for not less than two-thirds of the floor area of the room or space; and (ii) in other rooms — a height of not less than 2.4 m for not less than two-thirds of the floor area of the room or space; and (e) in a non-habitable room, or space within a non-habitable room, with a sloping ceiling or projections below the ceiling line — a height of not less than 2.1 m for not less than two-thirds of the floor area of the room or space.	Architect to coordinate with services engineer to ensure there are no services, overhead bulkheads or ventilations that will encroach within the minimum required ceiling heights. In general, the height of rooms and other spaces comply with the provision of the clause.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	(2) For the purposes of (1), when calculating the floor area of a room or space, any part that has a ceiling height of less than 1.5 m is not included. (3) The height of rooms and other spaces in a Class 5, 6, 7 or 8 building must be not less than— (a) except as allowed in (b) and (8) — 2.4 m; and (b) for a corridor, passageway, or the like — 2.1 m. (4) The height of rooms and other spaces in a Class 9a health-care building must be not less than— (5) The height of rooms and other spaces in a Class 9b building must be not be less than— (6) For the purposes of (5) the number of persons accommodated must be calculated according to D2D18. (7) The height of rooms and other spaces in a Class 9c building must be not be less than— (a) for a kitchen, laundry, or the like — 2.1 m; and (b) for a corridor, passageway or the like — 2.4 m; and (c) for a habitable room excluding a kitchen — 2.4 m. (8) The height of rooms and other spaces in any building must be not be less than— (a) for a bathroom, shower room, sanitary compartment, other than an accessible adult change facility, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like — 2.1 m; and (b) for a commercial kitchen — 2.4 m; and (c) above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like; and		

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(d) for a required accessible adult change facility — 2.4 m.		
Part F6 – Light and Ventilation			
F6D1: Deemed-to-Satisfy Provisions [2019: F4.0]	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance RequirementsF6P1 to F6P5 are satisfied by complying with— (a) F6D2 to F6D12; and (b) for a building containing an occupiable outdoor area, Part G6; and (c) for farm buildings and farm sheds, Part I3. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted	Noted

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
F6D2: Provision of natural light [2019: F4.1]	Natural light must be provided in: (a) A Class 2 building and a Class 4 part of a building — to all habitable rooms. (b) A Class 3 building — to all bedrooms and dormitories. (c) Class 9a and 9c buildings — to all rooms used for sleeping purposes. (d) A Class 9b building — to all general purpose classrooms in primary or secondary schools and all playrooms or the like for the use of children in an early childhood centre.	Natural light is required to all habitable rooms within the Class 2 habitable rooms.	CRA – Refer Appendix F
F6D3: Methods and extent of natural lighting [2019: F4.2]	(1) Required natural light must be provided by— (a) windows, excluding roof lights, that— (i) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 10% of the floor area of the room; and (ii) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or (b) roof lights, that— (i) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 3% of the floor area of the room; and (ii) are open to the sky; or (c) a proportional combination of windows and roof lights required by (a) and (b). (2) Except in a Class 9c aged care building, in a Class 2, 3 or 9 building or Class 4 part of a building, a required window that faces a boundary of an adjoining allotment or a wall of the same building or another building on the	The Class 2 bedrooms, living rooms and dining rooms are capable of achieving natural light via the window openings provided. The architect shall confirm that windows light transmittal area is sufficient for each room.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	allotment must not be less than a horizontal distance from that boundary or wall that is the greater of— (a) generally — 1 m; and (b) In a patient care area or other room used for sleeping purposes in a Class 9a building — 3 m; and (c) 50% of the square root of the exterior height of the wall in which the window is located, measured in metres from its sill. (3) In a Class 9c aged care building, a required window must be transparent and located— (a) in an external wall with the window sill not more than 1 m above the floor level; and (b) where the window faces an adjoining allotment, another building or another wall of the same building, it must not be less than a horizontal distance of 3 m from the adjoining allotment, other building or wall. (4) In a Class 9b early childhood centre, the sills of 50% of windows in children's rooms must be located not more than 500 mm above the floor level.		
F6D4: Natural light borrowed from adjoining room [2019: F4.3]	(1) Natural light to a room in a Class 2 building or Class 4 part of a building or in a sole-occupancy unit of a Class 3 building, may come through one or more glazed panels or openings from an adjoining room (including an enclosed verandah) if— (a) both rooms are within the same sole-occupancy unit or the enclosed verandah is on common property; and (b) the glazed panels or openings have an aggregate light transmitting area of not less than 10% of the floor area of the room to which it provides light; and (c) the adjoining room has—	This clause is not applicable due to compliance with F6D3.	NA

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(i) windows, excluding roof lights, that— (A) have an aggregate light transmitting area of not less than 10% of the combined floor areas of both rooms; and (B) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or (ii) roof lights, that— (A) have an aggregate light transmitting area of not less than 3% of the combined floor areas of both rooms; and (B) are open to the sky; or (iii) a proportional combination of windows and roof lights required by (i) and (ii). (2) The areas specified in (1)(b) and (c) may be reduced as appropriate if direct natural light is provided from another source.		
F6D5: Artificial Lighting [2019: F4.4]	(1) Artificial lighting must be provided— (a) in required stairways, passageways, and ramps; and (b) if natural light of a standard equivalent to that required by F6D3 is not available, and the periods of occupation or use of the room or space will create undue hazard to occupants seeking egress in an emergency, in— (i) a Class 4 part of a building — to sanitary compartments, bathrooms, shower rooms, airlocks and laundries; and (ii) a Class 2 building — to sanitary compartments, bathrooms, shower rooms, airlocks, laundries,	Artificial lighting must be provided in accordance with this clause. Electrical Engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	common stairways and other spaces used in common by the occupants of the building; and (iii) Class 3, 5, 6, 7, 8 and 9 buildings — to all rooms that are frequently occupied, all spaces required to be accessible, all corridors, lobbies, internal stairways, other circulation spaces and paths of egress. (2) The artificial lighting system must comply with AS/NZS 1680.0. (3) The system may provide a lesser level of illumination to the following spaces during times when the level of lighting would be inappropriate for the use: (a) A theatre, cinema or the like, when performances are in progress, with the exception of aisle lighting required by Part I1. (b) A museum, gallery or the like, where sensitive displays require low lighting levels. (c) A discotheque, nightclub or the like, where to create an ambience and character for the space, low lighting levels are used.		
NSW F6D6: Ventilation of rooms [2019: NSW F4.5(b)]	A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have— (a) natural ventilation complying with F6D7; or (b) a mechanical ventilation or air-conditioning system complying with AS 1668.2.	Ventilation must be provided in accordance with this clause. Mechanical engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
F6D7: Natural ventilation [2019: F4.6]	(1) Natural ventilation provided in accordance with F6D6(a) must consist of openings, windows, doors or other devices which can be opened—	Natural ventilation can be provided to habitable rooms via openable windows.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(a) with a ventilating area not less than 5% of the floor area of the room required to be ventilated; and (b) open to— (i) a suitably sized court, or space open to the sky; or (ii) an open verandah, carport, or the like; or (iii) an adjoining room in accordance with F6D8. (2) The requirements of (1)(a) do not apply to a Class 8 electricity network substation.	Mechanical engineer to provide design certification demonstrating compliance with this clause.	
F6D8: Ventilation borrowed from adjoining room [2019: F4.7]	Natural ventilation to a room may come through a window, opening, door or other device from an adjoining room (including an enclosed verandah) if both rooms are within the same sole-occupancy unit or the enclosed verandah is common property, and— (a) in a Class 2 building, a sole-occupancy unit of a Class 3 building or Class 4 part of a building— (i) the room to be ventilated is not a sanitary compartment; and (ii) the window, opening, door or other device has a ventilating area of not less than 5% of the floor area of the room to be ventilated; and (iii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 5% of the combined floor areas of both rooms; and (b) in a Class 5, 6, 7, 8 (except a Class 8 electricity network substation) or 9 building— (i) the window, opening, door or other device has a ventilating area of not less than 10% of the floor area of the room to be ventilated, measured not more than 3.6 m above the floor; and	Ventilation borrowed from adjoining room is not required due to adequate ventilation being provided in F6D7.	NA

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Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 10% of the combined floor areas of both rooms; and (c) the ventilating areas specified in (a) and (b) may be reduced as appropriate if direct natural ventilation is provided from another source.		
F6D9: Restriction on position of water closets and urinals [2019: F4.8]	A sanitary compartment must not open directly into— (a) a kitchen or pantry; or (b) a public dining room or restaurant; or (c) a dormitory in a Class 3 building; or (d) a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand); or (e) a workplace normally occupied by more than one person.	The sanitary compartments have been positioned to comply with the requirements of this clause.	CRA – Refer Appendix F
F6D10: Airlocks [2019: F4.9]	If a sanitary compartment is prohibited under F6D9 from opening directly to another room— (a) in a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building— (i) access must be by an airlock, hallway or other room; or (ii) the sanitary compartment must be provided with mechanical exhaust ventilation; and (b) in a Class 5, 6, 7, 8 or 9 building (which is not an early childhood centre, primary school or open spectator stand)— (i) access must be by an airlock, hallway or other room with a floor area of not less than 1.1 m^2 and fitted with self-closing doors at all access doorways; or	Airlocks are not required for sanitary compartments and therefore, this clause is not applicable.	NA

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(ii) the sanitary compartment must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened from view.		
F6D11: Carparks [2019: F4.11]	Every storey of a carpark, except an open-deck carpark, must have— (a) a system of mechanical ventilation complying with AS 1668.2; or (b) a system of natural ventilation complying with Section 4 of AS 1668.4.	Mechanical ventilation must be installed in accordance with this clause & AS1668.2. Mechanical engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F
F6D12: Kitchen local exhaust ventilation [2019: F4.12]	A commercial kitchen must be provided with a kitchen exhaust hood complying with AS 1668.1 and AS 1668.2 where— (a) any cooking apparatus has— (i) a total maximum electrical power input exceeding 8 kW; or (ii) a total gas power input exceeding 29 MJ/hour; or (b) the total maximum power input to more than one apparatus exceeds, per m^2 of floor area of the room or enclosure— (i) 0.5 kW electrical power; or (ii) 1.8 MJ/hour gas.	Where a commercial kitchen is provided, the kitchen exhaust shall be provided in accordance with this clause. Mechanical engineer to provide design certification demonstrating compliance with this clause.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
Part F7 – Sound Transmission and Insulation			
F7D1: Deemed-to-Satisfy Provisions [2019: F5.0]	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance RequirementsF7P1 to F7P4 are satisfied by complying with F7D2 to F7D8. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted	Noted
F7D2: Application of Part [2019: F5.1]	The Deemed-to-Satisfy Provisions of this Part apply to Class 2 and 3 buildings.	Sound Transmission and Insulation is a specialist area that requires design by an acoustic engineer. As such, we provide the criteria for that design, and demonstrating compliance with these criteria, is to be carried out by the acoustic consultant.	Noted
F7D3: Determination of airborne sound insulation ratings [2019: F5.2]	A form of construction required to have an airborne sound insulation rating must— (a) have the required value for weighted sound reduction index (Rw) or weighted sound reduction index with spectrum adaptation term (Rw + Ctr) determined in accordance with AS/NZS ISO 717.1 using results from laboratory measurements; or (b) comply with Specification 28.	Design by an acoustic engineer is required.	CRA – Refer Appendix F
F7D4: Determination of impact sound insulation ratings [2019: F5.3]	(1) A floor in a building required to have an impact sound insulation rating must— (a) have the required value for weighted normalised impact sound pressure level (Ln,w) determined in accordance with AS ISO 717.2 using results from laboratory measurements; or (b) comply with Specification 28. (2) A wall in a building required to have an impact sound insulation rating must—	Design by an acoustic engineer is required.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	(a) for a Class 2 or 3 building be of discontinuous construction and (b) for a Class 9c building, must— (i) for other than masonry, be two or more separate leaves without rigid mechanical connection except at the periphery; or (ii) be identical with a prototype that is no less resistant to the transmission of impact sound when tested in accordance with Specification 29 than a wall listed in S28C4 to S28C7. (3) For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2 separate leaves, and— (a) for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and (b) for other than masonry, there is no mechanical linkage between leaves except at the periphery.		
F7D5: Sound insulation rating of floors [2019: F5.4]	(1) A floor in a Class 2 or 3 building must have an Rw + Ctr (airborne) not less than 50 and an Ln,w (impact) not more than 62 if it separates— (a) sole-occupancy units; or (b) a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification.	Design by an acoustic engineer is required.	CRA – Refer Appendix F
	(2) A floor in a Class 9c building separating sole-occupancy units must have an Rw not less than 45.	Design by an acoustic engineer is required.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
F7D6: Sound insulation rating of walls [2019: F5.5]	(1) A wall in a Class 2 or 3 building must— (a) have an Rw + Ctr (airborne) not less than 50, if it separates sole-occupancy units; and (b) have an Rw (airborne) not less than 50, if it separates a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification; and (c) comply with F7D4(2) if it separates— (i) a bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than a kitchen) in an adjoining unit; or (ii) a sole-occupancy unit from a plant room or lift shaft. (2) A door may be incorporated in a wall in a Class 2 or 3 building that separates a sole-occupancy unit from a stairway, public corridor, public lobby or the like, provided the door assembly has an Rw not less than 30. (3) A wall in a Class 9c building must have an Rw not less than 45 if it separates— (a) sole-occupancy units; or (b) a sole-occupancy unit from a kitchen, bathroom, sanitary compartment (not being an associated ensuite), laundry, plant room or utilities room. (4) In addition to (3), a wall separating a sole-occupancy unit in a Class 9c building from a kitchen or laundry must comply with F7D4(2). (5) Where a wall required to have sound insulation has a floor above, the wall must continue to— (a) the underside of the floor above; or	Design by an acoustic engineer is required.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
	(b) a ceiling that provides the sound insulation required for the wall. (6) Where a wall required to have sound insulation has a roof above, the wall must continue to— (a) the underside of the roof above; or (b) a ceiling that provides the sound insulation required for the wall.		
F7D7: Sound insulation rating of services [2019: F5.6]	(1) If a duct or soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole-occupancy unit, the duct or pipe must be separated from the rooms of any sole-occupancy unit by construction with an Rw + Ctr (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. (2) If a stormwater pipe passes through a sole-occupancy unit, it must be separated in accordance with (1)(a) and (b).	Design by an acoustic engineer is required.	CRA – Refer Appendix F
F7D8: Sound isolation of pumps [2019: F5.7]	A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating pump.	Design by an acoustic engineer is required.	CRA – Refer Appendix F

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Clause	**Clause Requirements**	**Comment**	**Status**
Part F8 – Condensation Management			
F8D1: Deemed-to-satisfy provisions [2019: F6.0]	Informational	Noted	Noted
F8D2: Application of Part [2019: F6.1]	Informational	Noted	Noted
F8D3: External wall construction [2019: D6.2]	(1) Where a pliable building membrane is installed in an external wall, it must— (a) comply with AS 4200.1; and (b) be installed in accordance with AS 4200.2; and (c) be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building. (2) Where a pliable building membrane, sarking-type material or insulation layer is installed on the exterior side of the primary insulation layer of an external wall it must have a vapour permeance of not less than— (a) in climate zones 4 and 5, 0.143 µg/N.s; and (b) in climate zones 6, 7 and 8, 1.14 µg/N.s. (3) Except for single skin masonry and single skin concrete, where a pliable building membrane is not installed in an external wall, the primary water control layer must be separated from water sensitive materials by a drained cavity.	Compliance is readily achievable with the requirements of this Clause and shall be certified by a Weatherproofing Consultant.	CRA – Refer Appendix F
F8D4: Exhaust systems [2019: F6.3]	(1) An exhaust system installed in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of— (a) 25 L/s for a bathroom or sanitary compartment; and	Compliance is readily achievable with the requirements of this Clause and shall be certified by a Mechanical Services Consultant.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(b) 40 L/s for a kitchen or laundry. (2) Exhaust from a kitchen, kitchen range hood, bathroom, sanitary compartment or laundry must discharge directly or via a shaft or duct to outdoor air. (3) Where space for a clothes drying appliance is provided in accordance with F4D2(1)(b), space must also be provided for ducting from the clothes drying appliance to outdoor air. (4) (3) does not apply if a condensing-type clothes drying appliance is installed. (5) An exhaust system that is not run continuously and is serving a bathroom or sanitary compartment that is not ventilated in accordance with F6D7 must— (a) be interlocked with the room's light switch; and (b) include a run-on timer so that the exhaust system continues to operate for 10 minutes after the light switch is turned off. (6) Except for rooms that are ventilated in accordance with F6D7, a room with space for ducting a clothes drying appliance to outdoor air in accordance with (3) must be provided with make-up air in accordance with AS 1668.2		
F8D5: Ventilation of roof spaces [2019: F6.4]	(1) In climate zones 6, 7 and 8, a roof must have a roof space that— (a) is located— (i) immediately above the primary insulation layer; or (ii) immediately above sarking with a vapour permeance of not less than 1.14 µg/N.s, which is immediately above the primary insulation layer; or	Compliance is readily achievable with the requirements of this Clause and shall be certified by a Mechanical Services Consultant.	CRA – Refer Appendix F

Section F: Health and Amenity			
Clause	**Clause Requirements**	**Comment**	**Status**
	(iii) immediately above ceiling insulation which meets the requirements of J3D7(3) and J3D7(4); and (b) has a height of not less than 20 mm; and (c) is either— (i) ventilated to outdoor air through evenly distributed openings in accordance with Table F8D5; or (ii) located immediately underneath roof tiles of an unsarked tiled roof. (2) The requirements of (1) do not apply to a— (a) concrete roof; or (b) roof that is made of structural insulated panels; or (c) roof that is subject to Bushfire Attack Level FZ requirements in accordance with AS 3959.		

Section G: Ancillary provisions

Section G: Ancillary Provisions			
Clause	**Clause Requirements**	**Comment**	**Status**
Part G1 – Minor Structures and Components			
G1D1: Deemed-to-Satisfy Provisions [2019: G1.0]	(1) Performance RequirementG1P1 must be complied with. (2) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements G1P2 to G1P5 are satisfied by complying with G1D2 to G1D4. (3) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.	Noted	Noted
NSW G1D2: Swimming pools [2019: NSW G1.1]	NA	There is no swimming pools proposed and therefore, this clause is not applicable.	NA
G1D3: Refrigerated chambers, strong-rooms and vaults [2019: G1.2]	NA	This clause is not applicable to the subject building.	NA
G1D4: Outdoor play spaces [2019: G1.3]	NA	This clause is not applicable to the subject building.	NA
NSW G1D5: Provision for cleaning windows [2019: NSW G1.101]	(1) A building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level. (2) A building satisfies (1) where— (a) the windows can be cleaned wholly from within the building; or (b) provision is made for the cleaning of the windows by a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.	Provision for a safe manner of cleaning the windows must be provided in accordance with this clause.	CRA – Refer Appendix F

Section G: Ancillary Provisions			
Clause	**Clause Requirements**	**Comment**	**Status**
Part G2 – Boilers, Pressure Vessels, Heating Appliances, Fireplaces, Chimneys and Flues			
The building is not proposed to contain any of the above items, therefore Part G2 is not applicable to the subject building.			

Section G: Ancillary Provisions			
Clause	**Clause Requirements**	**Comment**	**Status**
Part G3 – Atrium Construction			
There is no atrium indicated in the proposal, therefore Part G3 is not applicable to the subject building.			

Section G: Ancillary Provisions			
Clause	**Clause Requirements**	**Comment**	**Status**
Part G4 – Construction in Alpine Areas			
The subject building is not located in an alpine area therefore Part G4 is not applicable.			

Section G: Ancillary Provisions			
Clause	**Clause Requirements**	**Comment**	**Status**
Part G5 – Construction in Bushfire Prone Areas			
The subject building is not located within a bushfire area therefore the provisions of part G5 are not applicable.			

Section G: Ancillary Provisions			
Clause	**Clause Requirements**	**Comment**	**Status**
Part G6 – Occupiable Outdoor Areas			
G6D1: Application of part [2019: G6.1]	(1) The Deemed-to-Satisfy Provisions of this Part apply to buildings containing an occupiable outdoor area in addition to the other Deemed-to-Satisfy Provisions of NCC Volume One. (2) The Deemed-to-Satisfy Provisions of this Part take precedence where there is a difference to the Deemed-to-Satisfy Provisions of Sections C, D, E, F and G. (3) Except for G6D2, the Deemed-to-Satisfy Provisions of this Part do not apply to— (a) an occupiable outdoor area of a sole-occupancy unit in a Class 2 or 3 building, Class 9c building or Class 4 part of a building; or (b) an occupiable outdoor area with an area less than 10 m^2.	For noting.	Noted
G6D2: Fire hazard properties [2019: G6.2]	(1) Subject to (2), a lining, material or assembly in an occupiable outdoor area must comply with C2D11 as for an internal element. (2) The following fire hazard properties of a lining, material or assembly in an occupiable outdoor area are not required to comply with C2D11: (a) Average specific extinction area. (b) Smoke-Developed Index. (c) Smoke development rate. (d) Smoke growth rate index ($SMOGRA_{RC}$).	Compliance is readily achievable for the occupiable outdoor area.	CRA – Refer Appendix F
G6D3: Fire Separation [2019: G6.3]	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	For noting.	CRA – Refer Appendix F

Section G: Ancillary Provisions			
Clause	**Clause Requirements**	**Comment**	**Status**
	used to separate an occupiable outdoor area into different *fire compartments*.		
G6D4: Provision for escape [2019: G6.4]	For the purposes of the Deemed-to-Satisfy Provisions of Part D2, a reference to a storey or room includes an occupiable outdoor area.	For noting.	CRA – Refer Appendix F
G6D5: Construction of exits [2019: G6.5]	For the purposes of the Deemed-to-Satisfy Provisions of Part D3, a reference to a storey or room includes an occupiable outdoor area.	For noting.	CRA – Refer Appendix F
G6D6: Fire fighting equipment [2019: G6.6]	Except for 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.	For noting.	CRA – Refer Appendix F
G6D7: Lift installations [2019: G6.7]	For the purposes of the Deemed-to-Satisfy Provisions of Part E3, a reference to a storey includes an occupiable outdoor area.	For noting.	CRA – Refer Appendix F
G6D8: Visibility in an emergency, exit signs and warning systems [2019: G6.8]	For the purposes of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area.	For noting.	CRA – Refer Appendix F
G6D9: Light and ventilation [2019: G6.9]	For the purposes of the Deemed-to-Satisfy Provisions of F6D5, F6D9 and F6D10, a reference to a room includes an occupiable outdoor area.	For noting.	CRA – Refer Appendix F
G6D10: Fire orders [2019: G6.10]	For the purposes of the Deemed-to-Satisfy Provisions of G4D8, a reference to a storey includes an occupiable outdoor area.	For noting.	CRA – Refer Appendix F

Section I: Special use buildings

Section I: Special Use Buildings			
Clause	**Clause Requirements**	**Comment**	**Status**
Part I1 – Class 9b Buildings			
Part I1 is not applicable due to building classification.			

Section I: Special Use Buildings			
Clause	**Clause Requirements**	**Comment**	**Status**
Part I2 – Public Transport Buildings			
The building is not a public transport building therefore the provisions of part I2 are not applicable.			

Section I: Special Use Buildings			
Clause	**Clause Requirements**	**Comment**	**Status**
Part I3 – Farm Building and Farm Sheds			
The building is not a farm building or shed therefore the provisions of Part I3 are not applicable.			

Section I: Special Use Buildings			
Clause	**Clause Requirements**	**Comment**	**Status**
NSW Parts I4, I5 and I6 – Entertainment Venues, Temporary Structures and Drive In Theatres			
The building is not a special use building under the NSW variations therefore Parts I4, I5 and I6 are not applicable.			

Section J: Energy efficiency

Section J: Energy Efficiency (Class 3, 5, 6, 7b, 8, 9)
Section J is a specialist area that addresses the building fabric, building sealing, mechanical ventilation, lighting and building management systems. Compliance with Section J generally requires detailed design by a combination of consultants which may include Energy consultants, Façade Engineers and Mechanical and electrical engineers. Given the specialist nature of Section J, and the need for design by other consultants, it is not within the scope of this BCA Assessment Report.

Appendix E Definitions

Average specific extinction area

Average specific extinction area means the average specific extinction area for smoke as determined by AS 5637.1:2015.

Critical radiant flux

Critical radiant flux (CRF) means the critical heat flux at extinguishment (CHF in kW/m^2) as determined by AS ISO 9239.1:2003.

Designated bushfire prone area

Designated bushfire prone area means land which has been designated under a power of legislation as being subject, or likely to be subject, to bushfires.

Effective height

Effective height means the vertical distance between the floor of the lowest storey included in a determination of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units).

Envelope

Envelope, for the purposes of Section J in Volume One, means the parts of a building's fabric that separate a conditioned space or habitable room from—

1. the exterior of the building; or
2. a non-conditioned space including—
    a. the floor of a rooftop plant room, lift-machine room or the like; and
    b. the floor above a carpark or warehouse; and
    c. the common wall with a carpark, warehouse or the like.

Exit

Exit means –

1. Any, or any combination of the following if they provide egress to a road or open space—
    a. An internal or external stairway.
    b. A ramp.
    c. A fire-isolated passageway.
    d. A doorway opening to a road or open space.
    e. A horizontal exit or a fire-isolated passageway leading to a horizontal exit.

Fire compartment

Fire compartment means –

1. the total space of a building; or
2. when referred to in—
    a. the Performance Requirements — any part of a building separated from the remainder by barriers to fire such as walls and/or floors having an appropriate resistance to the spread of fire with any openings adequately protected; or
    b. the Deemed-to-Satisfy Provisions — any part of a building separated from the remainder by walls and/or floors each having an FRL not less than that required for a fire wall for that type of construction and where all openings in the separating construction are protected in accordance with the Deemed-to Satisfy Provisions of the relevant Part.

Fire-resistance level (FRL)

Fire-resistance level (FRL) means the grading periods in minutes determined in accordance with Specification A2.3, for the following criteria—

1. structural adequacy; and
2. integrity; and
3. insulation,

and expressed in that order.

Note: A dash means that there is no requirement for that criterion. For example, 90/–/– means there is no requirement for an FRL for integrity and insulation, and –/–/– means there is no requirement for an FRL.

Fire-source feature

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

Fire wall

Fire wall means a wall with an appropriate resistance to the spread of fire that divides a storey or building into fire compartments.

Flammability index

Flammability Index means the index number as determined by AS 1530.2:1993.

Group number

Group number means the number of one of 4 groups of materials used in the regulation of fire hazard properties and applied to materials used as a finish, surface, lining, or attachment to a wall or ceiling.

Horizontal exit

Horizontal exit means a required doorway between 2 parts of a building separated from each other by a fire wall.

Loadbearing

Intended to resist vertical forces additional to those due to its own weight.

Non-combustible

Non-combustible means—

1. applied to a material — not deemed combustible as determined by AS 1530.1:1994 — Combustibility Tests for Materials; and
2. applied to construction or part of a building — constructed wholly of materials that are not deemed combustible

Occupiable outdoor area

Occupiable outdoor area means a space on a roof, balcony or similar part of a building–

1. that is open to the sky; and
2. to which access is provided, other than access only for maintenance; and
3. that is not open space or directly connected with open space.

Open space

Open space means a space on the allotment, or a roof or similar part of a building adequately protected from fire, open to the sky and connected directly with a public road.

Performance Requirement

Performance Requirement means a requirement which states the level of performance which a Performance Solution or Deemed-to-Satisfy Solution must meet.

Performance Solution

Performance Solution means a method of complying with the Performance Requirements other than by a Deemed-to-Satisfy Solution.

Sarking-type material

Sarking-type material means a material such as a reflective insulation or other flexible membrane of a type normally used for a purpose such as waterproofing, vapour management or thermal reflectance.

Smoke developed index

Smoke developed index means the index number for smoke as determined by AS/NZS 1530.3.

Smoke development rate

Smoke development rate means the development rate for smoke as determined by testing flooring materials in accordance with AS ISO 9239.1.

Smoke growth rate index

Smoke growth rate index (SMOGRA RC) means the index number for smoke used in the regulation of fire hazard properties and applied to materials used as a finish, surface, lining or attachment to a wall or ceiling.

Sole-occupancy unit

Sole-occupancy unit means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes—

1. a dwelling; or
2. a room or suite of rooms in a Class 3 building which includes sleeping facilities; or
3. a room or suite of associated rooms in a Class 5, 6, 7, 8 or 9 building; or
4. a room or suite of associated rooms in a Class 9c building, which includes sleeping facilities and any area for the exclusive use of a resident.

Appendix F BCA compliance specification

The following BCA matters (including any applicable NSW variations) are to be addressed by specific BCA Design Certificate to be issued by the relevant architectural, services and engineering consultants at the Construction Certificate Stage and to satisfy their obligations under the Design and Building Practitioners Act 2020 within their individual design compliance declarations.

This schedule should be forwarded to all consultants to obtain verification that these items have and will be included in the design documentation / specifications:

Architectural Design Certification

1. Lightweight construction used to achieve required fire resistance levels will comply with Specification C2D9 of the BCA.
2. Building elements must be non-combustible in accordance with C2D10 of the BCA.
3. Materials, floor and wall linings/coverings, surface finishes and air-handling ductwork used in the works will comply with the fire hazard properties of Clause C2D11 and Specification 7 of the BCA.
4. Any ancillary elements fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible will comply with Clause C2D14 of the BCA.
5. Vertical separation will be provided to the new openings in the external walls in accordance with Clause C3D7 of the BCA. It is noted that no spandrel separation is required in the stairway or to a void.
6. The fire walls proposed to separate buildings and/or fire compartments will comply with Clause C3D8 of the BCA.
7. The parts of different classifications located alongside one another in the same storey will be separated in accordance with Clause C3D9 and Specification 5 of the BCA.
8. Floors separating storeys of different classifications will comply with BCA Clause C3D10 of the BCA.
9. Equipment will be separated in accordance with Clause C3D13 of the BCA.
10. The electricity substation, any main switch room sustaining emergency equipment required to operate in emergency mode, will be separated from the remaining building with construction having an FRL 120/120/120 and provided with self-closing -/120/130 fire doors in accordance with Clause C3D14 of the BCA.
11. The public corridors will be divided into intervals of not more than 40m in length with smoke proof walls in accordance with Clause C3D15, and S11C2 of the BCA.
12. Openings in the external walls that are required to have an FRL will be in located in accordance with Clause C4D3 and C4D4 of the BCA or protected in accordance with Clause C4D5 of the BCA.
13. The external walls and openings of separate fire compartments will be protected in accordance with Clause C4D4.
14. Doorways in any fire walls separating fire compartments will be protected in accordance with Clause C4D6 of the BCA.
15. Doors in a fire-isolated exit will be self-closing or automatic closing fire doors with an FRL of not less than -/60/30 in accordance with Clause C4D9 of the BCA.
16. Fire-isolated stairways will not be penetrated by services other than those permitted by Clause C4D10 of the BCA.

17. Services penetrating elements required to possess an FRL including the floor slabs, walls, shafts, etc. will be protected in accordance with Clause C4D13, C4D14. and C4D15 and Specification 13 of the BCA.
18. Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation will be protected in accordance with BCA Clause C4D16.
19. The lift doors will be -/60/- fire doors complying with AS 1735.11:1986 in accordance Clause C4D11 of the BCA.
20. Doorways and other openings in internal walls required to have an FRL will be protected in accordance with Clause C4D12 of the BCA.
21. Columns protected by light weight construction will achieve an FRL not less than the FRL for the element it is penetrating, in accordance with Clause C4D17 of the BCA.
22. A lintel will have the FRL required for the part of the building in which it is situated, unless it does not contribute to the support of a fire door, fire window or fire shutter, and it spans an opening in masonry which is not more than 150 mm thick and is not more than 3m wide if the masonry is non- loadbearing; or not more than 1.8m wide if the masonry is loadbearing and part of a solid wall or one of the leaves of a cavity wall, or it spans an opening in a non-loadbearing wall of the Class 2 or 3 building, in accordance with S5C4 of the BCA.
23. All attachments to the external façade of the building will be fixed in a way that does not affect the fire resistance of that element in accordance with S5C6 of the BCA.
24. The top and bottom of the riser shafts will achieve an FRL not less than the FRL required for the walls of the shaft in accordance with S5C8 of the BCA.
25. Fire doors will comply with AS 1905.1:2015 and Specification 12 of the BCA.
26. The number of exits provided to the building will be in accordance with Clause D2D3 of the BCA.
27. The required exits will be fire-isolated in accordance with Clause D2D4 of the BCA.
28. Travel distances to exits will be in accordance with Clause D2D5 of the BCA.
29. The alternative exits will be distributed uniformly around the storey and will not be less than 9m apart, and not more that 45m apart in the residential portion or patient care areas in the health-care building or 60m, in accordance with Clause D2D6 of the BCA.
30. The dimensions of exits and paths of travel to exits, including the height, width, and width of doorways will be provided in accordance with D2D7 to D2D10 of the BCA.
31. The fire-isolated exits will be in accordance with Clause D2D12 of the BCA.
32. Smoke separation will be provided between the exit stairs at the level of discharge in accordance with Clause D2D14 of the BCA.
33. Discharge from exits will be in accordance with Clause D2D15 of the BCA.
34. The non-required stairways, ramps and escalators will be in accordance with Clause D2D17 of the BCA.
35. The ladder from the plant, lift machine rooms, and electricity network substation in lieu of a stairway will be in accordance with Clause D2D21 of the BCA.
36. Access to the lift pit will be in accordance with Clause D2D22 of the BCA.
37. The stairway or ramp within the fire-isolated shaft is to be non-combustible, and if there is a local failure will not cause structural damage or impair the fire resistance of the shaft, in accordance with Clause D3D3 of the BCA.

38. The non-fire isolated stairs will be constructed in accordance with Clause D3D4 of the BCA.
39. The construction separating rising and descending stairs in the fire-isolated exit stairway will be non-combustible and smoke proof, in accordance with Clause D3D5 of the BCA.
40. The construction of EDB's and telecommunications distribution boards will be in accordance with Clause D3D8 of the BCA with the enclosure bounded by non-combustible construction or fire protective covering and smoke seals provided around the perimeter of the non-combustible doors and any openings sealed with non-combustible mastic to prevent smoke spreading from the enclosure.
41. The enclosing walls and ceiling under the non-fire-isolated stairway will achieve an FRL of 60/60/60 and have a self-closing -/60/30 fire door, in accordance with Clause D3D9 of the BCA.
42. New pedestrian ramps will comply with AS 1428.1:2009, Clause D3D11 and Part D4 of the BCA. The floor surface of a ramp must have a slip-resistance classification complying with Table D3D15 when tested in accordance with AS 4586:2013.
43. The fire-isolated passageway will be in accordance with Clause D3D12 of the BCA.
44. The roof of the building where the exit discharges will have an FRL of 120/120/120, and will not have roof lights or openings within 3m of the path of travel in accordance with Clause D3D13 of the BCA.
45. Stair geometry will be in accordance with Clause D3D14 of the BCA. Stair treads are to have a surface with a slip-resistance classification complying with Table D3D15 when tested in accordance with AS 4586:2013.
46. Landings and door thresholds throughout the development will be provided in accordance with Clause D3D15 and D3D16 of the BCA. Landings will have either a surface with a slip-resistance classification complying with Table D3D15 when tested in accordance with AS 4586:2013 or a strip at the edge of the landing with a slip-resistance classification complying with Table D3D15 when tested in accordance with AS 4586:2013.
47. The handrails and balustrades to all stairs and throughout the building will be in accordance with D3D17 to D3D22 of the BCA.
48. The fixed platform, walkway, stairway and ladder and any associated going and riser, landing handrail, balustrade, located within the machinery room, boiler house, lift-machine room, plant-room, or non-habitable attic/storeroom within the sole occupancy unit will comply with AS 1657:2018 or Part D3 of the BCA.
49. The doorways and doors will be in accordance with Clause D3D24 and D3D25 of the BCA.
50. Door latching mechanisms will be in accordance with Clause D3D26 of the BCA
51. Re-entry doors from the fire-isolated exits will be in accordance with Clause D3D27 of the BCA.
52. Signage will be provided on fire and smoke doors in accordance with Clause D3D28 of the BCA.
53. The openable portion of a window in a bedroom of a Class 2 building will be protected with a restricting device or secure screen that does not allow a 125mm sphere to pass through the opening or screen and resist an outward horizontal action of 250N in accordance with Clause D3D29 of the BCA. In addition to window protection, and for other openable windows 4 meters or more above the ground below, a barrier with a height not less than 865mm above the floor will be installed to the openable window.
54. The new works will be accessible in accordance with Clause D4D1 to D4D4 of the BCA, and with AS 1428.1:2009, with particular note to door circulation spaces, accessway widths, turning spaces and floor coverings, in accordance with Part D4 of the BCA.
55. Accessible carparking will be in accordance with Clause D4D6 of the BCA.

56. Braille and tactile signage will in accordance with Clause D4D7, and Specification 15 of the BCA.
57. Hearing augmentation system will be provided in accordance with Clause D4D8 of the BCA.
58. Tactile ground surface indicators will be provided in accordance with Clause D4D9 of the BCA and AS/NZS 1428.4.1:2009.
59. The ramps associated with the accessway will not have a combined vertical rise of more than 3.6m and a landing for a step ramp will not overlap a landing for another step ramp of ramp in accordance with Clause D4D12 of the BCA.
60. On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, will be clearly marked in accordance with AS 1428.1:2009 and Clause D4D13 of the BCA.
61. The fire control centre will be in accordance with Specification 19 of the BCA.
62. Fire precautions whilst the building is under construction will be in accordance with Clause E1D16 of the BCA.
63. Additional provisions will be made in accordance with Clause E1D17 of the BCA, due to the special hazards associated with the building works or the location of the building works.
64. Non-illuminated exit signage will be installed in accordance with Clause E4D7, and of the BCA.
65. External above ground waterproofing membranes will comply with Clause F1D5 of the BCA and AS 4654 Parts 1 & 2:2012.
66. The new roof covering will be in accordance with Clause F3D2 of the BCA.
67. Any sarking proposed will be installed in accordance with Clause F3D3 of the BCA.
68. Waterproofing of all wet areas to the building will be carried out in accordance with Clause F2D2 of the BCA and AS 3740:2010.
69. Damp proofing of the proposed structure will be carried out in accordance with Clause F1D6 and F1D7 of the BCA.
70. Floor wastes will be installed to bathrooms and laundries above sole-occupancy units or public space in accordance with Clause F2D4 of the BCA.
71. All new glazing will be in accordance with Clause F3D4 of the BCA and AS 1288:2021 / AS 2047:2014 (incorporating amendments 1 and 2).
72. Sanitary facilities will be provided in the building in accordance with Clause F4D1, and F4D2 to F4D8 of the BCA.
73. Accessible sanitary facilities will be provided in the building in accordance with ClauseF4D5 and F4D6 of the BCA and AS1428.1:2009.
74. The construction of the sanitary facilities will be in accordance with Clause F4D8 of the BCA.
75. Ceiling heights will be in accordance with Clause F5D2 of the BCA.
76. Natural light will be provided in accordance with Clause F6D6, F6D7, and F6D8 of the BCA.
77. Natural ventilation will be provided in accordance with Clause F6D6, F6D7, and F6D8 of the BCA.
78. Water closets and urinals will be located in accordance with Clause F6D9 of the BCA.
79. The sanitary compartments will either be provided with mechanical exhaust ventilation or an airlock in accordance with Clause F6D10 of the BCA.

80. Pliable building membranes installed in external walls will comply with Clause F8D3 of the BCA and where a pliable building membrane is not installed in an external wall, the primary water control layer will be separated from water sensitive materials by a drained cavity.
81. Every storey of the carpark will be provided with an adequate system of permanent natural or mechanical ventilation in accordance with Clause F6D11 of the BCA.
82. A safe manner for cleaning of windows located 3 or more storeys above ground level will be provided in accordance with the Work Health & Safety Act 2011 and regulations made under that Act in accordance with NSW G1D5 of the BCA.
83. The occupiable outdoor area is to comply with the requirements of Part G6 of the BCA.
84. Essential fire or other safety measures will be maintained and certified on an ongoing basis, in accordance with the provisions of the Environmental Planning and Assessment Regulation, 2000.

Electrical Services Design Certification:

85. A smoke detection and alarm system will be installed throughout the building in accordance with Part E2 of the BCA.
86. Emergency lighting will be installed throughout the development in accordance with Clause E4D2 and E4D4 of the BCA and AS/NZS 2293.1:2018.
87. Exit signage will be installed in accordance with Clause E4D5, E4D7 and E4D8 of the BCA and AS/NZS 2293.1:2018.
88. An emergency warning and intercom system (EWIS) will be provided to the building in accordance with Clause E4D9 of the BCA.
89. Artificial lighting will be installed throughout the development in accordance Clause F6D5 of the BCA and AS/NZS 1680.0:2009.
90. Electrical conductors located within the building that supply a main switchboard that sustains emergency equipment will comply with Clause C3D14 of the BCA.

Hydraulic Services Design Certification:

91. Storm water drainage will be provided in accordance with Clause F1D3 of the BCA and AS/NZS 3500.3:2018
92. Fire hydrant system will be installed in accordance with Clause E1D2 of the BCA and AS 2419.1:2021 as required.
93. Fire hose reels will be installed in accordance with Clause E1D3 of the BCA and AS 2441:2005.
94. A sprinkler system will be installed in accordance with Clauses E1D4 to E1D13 of the BCA as applicable, and Specification 17 and appropriate part(s) of AS 2118.
95. Portable fire extinguishers will be installed in accordance with Clause E1D14 of the BCA and AS 2444:2001.
96. The heated water supply systems will be designed and installed to NCC Volume Three – Plumbing Code and Clause J7.2 of the BCA.

Mechanical Services Design Certification:

97. An air-handling system which does not form part of a smoke hazard management system will be installed in accordance with Clause E2D3 of the BCA, and AS 1668.1:2015.

98. Stair pressurisation will be installed in the building in accordance with Clause E2D4 of the BCA and AS 1668.1:2015.
99. Zone pressurisation will be installed in the building in accordance with Clause E2D6 of the BCA and AS1668.1:2015.
100. Where not naturally ventilated the building will be mechanically ventilated in accordance with Clause F6D6 of the BCA and AS 1668.2:2012.
101. Every storey of the car park will be ventilated in accordance with Clause F6D11 of the BCA and where not naturally ventilated it will be mechanically ventilated in accordance with AS 1668.2:2012 as applicable.
102. The commercial kitchen will be provided with a kitchen exhaust system in accordance with Clause F6D12 of the BCA, and AS 1668.1:2015 and AS 1668.2:2012.
103. Exhaust systems installed in a kitchen, bathroom, sanitary compartment or laundry of a Class 2 sole-occupancy unit will have a minimum flow rate and discharge location in accordance with Clause F8D4 of the BCA.
104. Where exhaust discharges directly or via shaft into a roof space of a Class 2 sole-occupancy unit, ventilation of the roof space will comply with Clause F8D5 of the BCA.
105. The air-conditioning and ventilations systems will be designed and installed in accordance with Part J5 of the BCA
106. Rigid and flexible ductwork will comply with the fire hazard properties set out in AS 4254 Parts 1 and 2.

Structural Engineers Design Certification:

107. The material and forms of construction for the proposed works will be in accordance with Clause B1D2, B1D3 and B1D4 of the BCA as follows:
    a. Dead and Live Loads – AS/NZS 1170.1:2002 (incorporating amendments 1 and 2)
    b. Wind Loads – AS/NZS 1170.2:2021
    c. Earthquake actions – AS 1170.4:2007
    d. Masonry – AS 3700:2018
    e. Concrete Construction – AS 3600:2018
    f. Steel Construction AS 4100:1998
    g. Aluminium Construction – AS/NZS 1664.1 or 2:1997
    h. Timber Construction – AS 1720.1:2010
    i. ABCB Standard for Construction of Buildings in Flood Hazard Areas.
108. The FRL's of building elements for the proposed works have been designed in accordance with Tables S5C11a to S5C11g of the BCA for a building of Type A Construction.
109. The lift shaft will have an FRL in accordance with S5C8 of the BCA.
110. Lightweight construction used to achieve required fire resistance levels will comply with Specification 6 of the BCA.
111. The construction joints to the structure will be in accordance with Clause C4D16 of the BCA to reinstate the FRL of the element concerned.

112. Upon completion of the works, a structural engineer will be able to certify that local failure will be in accordance with Clause D3D3 of the BCA for the fire isolated stairs.

Lift Services Design Certification:

113. The lifts throughout the development will be provided with stretcher facilities in accordance with Clause E3D3 of the BCA and will be capable of accommodating a stretcher with a patient lying horizontally by providing a clear space not less than 600mm wide x 2000mm long x 1400mm high above the floor level.
114. Warning signage in accordance with Clause E3D4 of the BCA will be provided to advise not to use the lifts in a fire.
115. An emergency lift will be provided in the building in accordance with Clause E3D5 of the BCA.
116. A fire service recall control switch is to be installed on a landing at a location nominated by the appropriate authority in accordance with Clause E3D11.
117. A lift car fire service drive control switch is to be installed within the lift car in accordance with Clause E3D9.
118. Access and egress to the lift landings will comply with the Deemed-to-Satisfy Provisions of D4 of the BCA and will be suitable to accommodate disabled persons.
119. The type of lifts will be suitable to accommodate persons with a disability in accordance with Clause E3D8 and will have accessible features in accordance with that clause.
120. The lifts will comply with AS 1735.12:1999 in accordance with Clause E3D8 of the BCA.
121. All electric passenger lifts and electrohydraulic passenger lifts shall comply with Specification 24 of the BCA.

Acoustic Services Design Certification:

122. The sound transmission and insulation of the residential portions of the development will comply with Part F75 of the BCA.

NSW Specification Design Certificate:

123. Materials, floor and wall linings/coverings, surface finished, and air-handling ductwork used in the works will comply with the fire hazard properties in accordance with Clause C2D11, NSW Clause C2D11, Specification 7 and NSW Specification 7 of the BCA.
124. The building will be separated in accordance with Clause C3D6, and NSW Clause C3D6 of the BCA.
125. Doorways and other openings in internal walls required to have an FRL will be protected in accordance with Clause C4D12, and NSW Clause C4D12 (4) and (5) of the BCA.
126. The number of exits provided to the building will be in accordance with Clause D2D3 and NSW Clause D2D3(4) of the BCA.
127. The discharge points of exits will be in accordance with Clause D2D15, and NSW Clause D2D15(6) of the BCA.
128. The width of doorways in exits and paths of travel to exits will be provided in accordance with Clause D2D9, and NSW Clause D2D9(a) to (g) of the BCA.
129. Stair geometry to the new stairways will be in accordance with Clause D3D14, and NSW Clause D3D14(1) of the BCA. Stair treads are to have a surface with a slip-resistance classification complying

with Table D3D154 when tested in accordance with AS 4586:2013 or a nosing strip with a slip-resistance classification complying with Table D3D15 when tested in accordance with AS 4586:2013.

130. Landings and door thresholds throughout the development will be provided in accordance with Clause D3D15 and D3D162.15, and NSW Clause D3D16(a) to (e) of the BCA. Landings to have either a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586:2013 or a strip at the edge of the landing with a slip-resistance classification complying with Table D3D15 when tested in accordance with AS 4586:2013 where the edge leads to a flight below.
131. The height of barriers is to be in accordance with D3D18 and NSW D3D18(1) of the BCA.
132. The doorways and doors will be in accordance with Clause D3D24, NSW Clause D23D24(2) of the BCA.
133. The door latching mechanisms to the proposed required exit doors will be in accordance with Clause D3D26 and NSW Clause D3D26(5) and (6) of the BCA.
134. Insulation will be in accordance with AS/NZS 4859.1:2018 and will be installed as required by NSW Part J1 of the BCA.