

INTEGRATED PROJECTS PTY LTD

# BCA ASSESSMENT REPORT

*Dapto Leagues Club*

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## Document Control

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## Jensen Hughes Australia

### Providing building regulations, fire engineering, accessibility, and energy consulting services to NSW for over 25 years

Our story begins in 1997 with the founding of BCA Logic to fulfill the demand of a consultancy company whose expertise expanded across the entire life cycle of a building, from consulting on the initial planning through to construction and occupation.

BCA Logic, SGA Fire and BCA Energy joined Jensen Hughes in 2021, a leading global, multi-disciplinary engineering, consulting and technology firm focused on safety, security and resiliency. We continue to be at the forefront of our industry and work thoroughly to preserve our position by ensuring the successful delivery of projects.

Jensen Hughes was launched in 2014 through the historic merger of Hughes Associates and Rolf Jensen & Associates (RJA), two of the most experienced and respected fire protection engineering companies at the time. Since then, we have gained market leadership in nuclear risk consulting and established commanding positions in areas like forensic engineering, security risk consulting and emergency management. Over the past 22 years, our integration of more than 30 privately held engineering and consulting firms has dramatically expanded our global footprint, giving us a powerful market presence ten times larger than our nearest competitor in some of our markets and extending our historical lineage back to 1939.

With more than 90 offices and 1500 employees worldwide supporting clients globally across all markets, we utilise our geographic reach to help better serve the needs of our local, regional, and multinational clients. In every market, our teams are deeply entrenched in local communities, which is important to establishing trust and delivering on our promises.

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## Executive summary

This document provides an assessment of the architectural design drawings for the proposed development at Dapto Leagues Club, against the Deemed-to-Satisfy provisions of the Building Code of Australia (BCA) 2022.

Part 3 'Matters for Further Consideration' of this report provides additional information for proposed Performance Solutions and fire safety upgrade works under the relevant legislation.

Annexure D to this report provides a detailed assessment of the proposal against ALL relevant Deemed-to-Satisfy Provisions of the BCA. The plans assessed were developed to a standard suitable for submission as a development application and do not contain all the details necessary to allow a CC to be issued. As such, this assessment is limited to the major items of the BCA with the view of identifying any items that may result in a modified development consent being required, or additional key items that need to be included in the design.

The architectural design documentation as referred to in report has been assessed against the applicable provisions of the Building Code of Australia, (BCA) and it is considered that such documentation complies or is capable of complying (as outlined in Annexure D) with that Code subject to providing the necessary performance solutions outlined below and providing additional information where indicated below.

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
<b>Performance Solutions Required</b>		
1.	With the proposed car park building on the same allotment, parts of the existing club building are now within 18m of the car park building. Rationalise the existing loadbearing columns in the club building within 18m to the car park building to have nil FRL.	C2D2 & S5C21
2.	Club Building: Ground Floor fire compartment exceeds 5,500m <sup>2</sup> and will be addressed via a Performance Solution which permits the building to exceed limitations in C3D3 without the requirement for compliance with C3D4.	C3D3
3.	The proposed development includes a new Porte Cochere covered area to connect between the club building and the car park building. Refer to Figure 1 in Part 2 of Report. This is considered to create a connection between the two buildings, thus creating one united building. However, the two buildings will be assessed as separate buildings via a Performance Solution. Whilst acknowledging the Porte Cochere provides connection between the buildings, the Performance Solution will rationalise the omission of fire walls to separate buildings as noted under Clause C3D8(2) due to the open nature of the Porte Cochere and assess the buildings as separate buildings under the provisions of BCA 2022.	C3D8 & C3D3
4.	Club Building Ground Floor: central area of the club (Grid Q5) is up to 45m to an exit in lieu of 40m.	D2D5

Item	Description	BCA Provision
5.	Car Park: Permit up to 45m to an exit and permit up to 80-85m between exits	D2D5 & D2D6
6.	Level 1 Fire Stair 8: Permit the fire stair to serve the stores area whereby the stores room does not occupy the whole storey. Level 1 Fire Stair 8: Permit the fire stair discharge at ground level to pass within 6m of openings in the external wall which may not be protected in accordance with C4D5. In addition, the external wall may not provide the required FRL 60/60/60.	D2D12
7.	Permit the basement exit stairs to discharge adjacent each other at ground level in lieu of as far apart as practical.	D2D15
8.	The keg room located underneath the stair will not maintain an FRL or be separated from the remainder of the storey or the non-fire isolated stairway	D3D9
9.	The Club building will address compliance with Part E2 of the BCA with a performance-based approach to address smoke hazard management in accordance with Performance Requirement E2P2	NSW E2D19
10.	Performance Solution will be required to address weatherproofing for new external walls which contain CFC cladding which is not a DTS solution under F3D5.	F3D5 & F3P1

## NCC Clause Numbering

BCA2022 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).



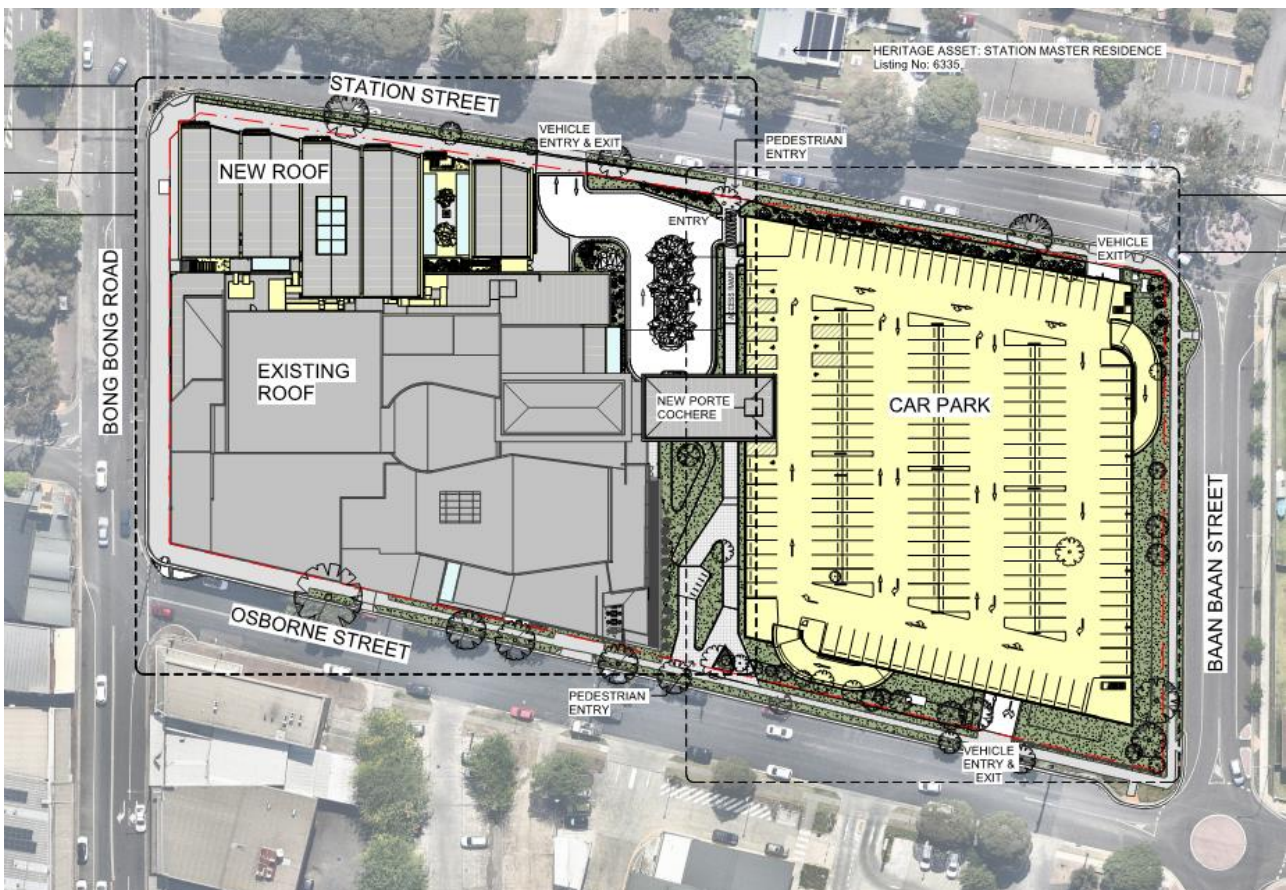
## 1.0 Basis of Assessment

### 1.1 LOCATION AND DESCRIPTION

The building development, the subject of this report, is the Dapto Leagues Club, located at the site surrounded by Station Street, Osborne Street, Bong Bong Road and Bann Baan Street.

The development consists of the following:

- Demolition of the western portion of the building and internal demolition of areas to be refurbished.
- Construction of single storey food & beverage venue to the western part of the building.
- Internal refurbishment to selected areas.
- Retention of the level 1 function room, admin and amenities areas.
- Refurbishment of the external drop off and club entry area
- Construction of a two storey carpark over the existing carpark – construct a concrete structure level 1 car park over the existing carpark.



### 1.2 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.

### 1.3 BUILDING CODE OF AUSTRALIA

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**), 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**, being volume 1 of the NCC.

### 1.4 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. It is noted a separate Access Consultant / Report is provided);
  - 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.

### 1.5 DESIGN DOCUMENTATION

This report has been based on the Design plans and Specifications listed in Annexure 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 SEPARATE BUILDING ASSESSMENT

The proposed development includes a new Porte Cochere covered area to connect between the club building and the car park building. Refer to Figure 1 below. This is considered to create a connection between the two buildings, thus creating one united building. However, the two buildings will be assessed as separate buildings via a Performance Solution. Whilst acknowledging the Porte Cochere provides connection between the buildings, the Performance Solution will rationalise the omission of fire walls to separate buildings as noted under Clause C3D8 due to the open nature of the Porte Cochere and assess the building as separate buildings under the provisions of BCA 2022.

### 2.2 RISE IN STOREYS (CLAUSE C2D3)

The club building has a rise in storeys of two. The building contains four storeys however under the provisions of Clause C2D3 the building has a rise in storeys of two. The basement level is below ground and not counted in the rise in storeys. The top storey, Level 2 plant room, only contains plant and therefore is not counted in the rise in storeys as per C2D3(2)(a).

The car park building has a rise in storeys of one. The level 1 part is not a story as it does not have a floor or roof over.



Figure 1: Level 2 plant room only contains plant and therefore is not counted in the rise in storeys as per C2D3(2)(a). New roof area in yellow is the new Porte Cochere connecting from the club building to the new car park building.

## 2.3 CLASSIFICATION (CLAUSE A6G1)

The buildings have been classified as follows.

Table 1: Building Classification

Class	Level	Description
Class 9b	Basement Level, Ground Level & Level 1+2	Club building – assembly building
	Note: Level 2 only contains plant and under Clause A6G1(3) the plant room shall adopt the same classification Class 9b as the principal use of the building.	
Class 7a	Ground Level & Level 1	Car park building
	Note: Level 1 of the car park building is an open-deck car park.	

## 2.4 EFFECTIVE HEIGHT (CLAUSE A1G4)

Each building has an *effective height* of less than 12 metres.

## 2.5 TYPE OF CONSTRUCTION REQUIRED (TABLE C2D2)

The club building is required to be of Type B Construction.

The car park building is required to be of Type C Construction.

## 2.6 FLOOR AREA AND VOLUME LIMITATIONS (TABLE C3D3)

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

Class 9b	Maximum Floor Area	5,500m <sup>2</sup>
	Maximum Volume	33,000m <sup>3</sup>
.....		
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.	

## 2.7 FIRE COMPARTMENTS

The following *fire compartments* have been assessed:

1. Club Building: Basement level is a separate fire compartment. New walls to close off part of the cellar will be fire walls to create a separate fire compartment.
2. Club Building: Ground Floor is a separate fire compartment.
3. Club Building: Level 1 is a concrete floor supported by concrete columns and the walls surrounding the function room and ancillary rooms are constructed as fire walls (as identified by the client) to create a separate fire compartment for Level 1.

4. Club Building: Level 2 plant room is not counted in the floor area or volume of a fire compartment if it is situated at the top of the building – refer Clause C3D3(2).
5. Car Park Building: The building is one fire compartment. The ground floor storey has a AS 2118.1 sprinkler system and is not subject to fire compartment limitations – refer Clause C3D2(1). The Level 1 storey is an open-deck carpark and is not subject to fire compartment limitations – refer Clause C3D2(1).

## 2.8 EXITS

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

1. Club Building: Basement level has two non-fire isolated stairs.
2. Club Building: Ground Floor has multiple exits.
3. Club Building: Level 1 function room has existing Stair 01 & Stair 02. Stores area has the proposed Stair 08 fire-isolated stair – one fire-isolated exit is permitted to store rooms as per NSW D2D3(4)(b).
4. Club Building: Level 2 plant room has one fire-isolated stair as the required exit which is permitted under NSW D2D3(4)(a)(vi) as the storey has less than 50 persons.
5. Car Park Ground Floor: Exit gate at bottom of Stair 13, vehicle driveway to Osborne Street is permanently open, Stair 10 next to lift, NW vehicle driveway to Station Street is permanently open, SW vehicle driveway to Station Street is permanently open, Exit door to north.
6. Car Park Level 1: NE & NW non-fire isolated stair and non-fire isolated stair adjacent lift.

## 2.9 CLIMATE ZONE

The building is located within Climate Zone 5.

## 2.10 ENTERTAINMENT VENUE

The NSW variation of the BCA, Part NSW14 contains additional requirements for entertainment venues. An entertainment venue is defined by the Environmental Planning and Assessment Act 2021 as:

***‘entertainment venue means a building used as a cinema, theatre or concert hall or an indoor sports stadium’.***

The subject building has not been considered an entertainment venue for the purposes of this report.

## 2.11 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 club building, it is considered that the most appropriate Importance level is three (3). 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.

The car park building is considered that the most appropriate Importance level is two (2).

Table B1D3a of the BCA provides the following:

Importance Level	Building Types	Jensen Hughes Interpretation and Examples
1	Buildings or structures presenting a low degree of hazard to life and other property in the case of failure.	1 and 2 storey factory buildings
2	Buildings or structures not included in Importance Level 1, 3 and 4.	Residential apartment buildings and associated carparking. Office buildings
3	Buildings or Structures that are designed to contain a large number of people.	Stadia, Entertainment venues, shopping centres. Transport facilities
4	Buildings or Structures that are essential to post-disaster recovery or associated with hazardous facilities.	Data centres, evacuation centres

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 3:**

- Buildings and facilities where more than 300 people can congregate in one area.

## **2.12 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:

#### Club Building:

North: The car park building. The external walls of club building are more than 6m away to the car park building, however some parts are within 18m of the car park building.

South: The far boundary of Bong Bong Road.

East: The far boundary of Osborne Street.

West: The far boundary of Station Street.

#### Car Park Buildnig:

North: The far boundary of Baan Bann Street.

South: The club building. The external walls of club building are more than 6m away to the car park building.

East: The far boundary of Osborne Street.

West: The far boundary of Station Street.



### 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*.

Annexure 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 Annexure 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.

#### 3.2 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
<b>Performance Solutions required</b>		
1.	With the proposed car park building on the same allotment, parts of the existing club building are now within 18m of the car park building. Rationalise the existing loadbearing columns in the club building within 18m to the car park building to have nil FRL.	C2D2 & S5C21
2.	Club Building: Ground Floor fire compartment exceeds 5,500m <sup>2</sup> and will be addressed via a Performance Solution which permits the building to exceed limitations in C3D3 without the requirement for compliance with C3D4.	C3D3
3.	The proposed development includes a new Porte Cochere covered area to connect between the club building and the car park building. Refer to Figure 1 in Part 2 of Report. This is considered to create a connection between the two buildings, thus creating one united building. However, the two buildings will be assessed as separate buildings via a Performance Solution. Whilst	C3D8

	acknowledging the Porte Cochere provides connection between the buildings, the Performance Solution will rationalise the omission of fire walls to separate buildings as noted under Clause C3D8(2) due to the open nature of the Porte Cochere and assess the buildings as separate buildings under the provisions of BCA 2022.	
4.	Club Building Ground Floor: central area of the club (Grid Q5) is up to 45m to an exit in lieu of 40m.	D2D5
5.	Car Park: Permit up to 45m to an exit and permit up to 80-85m between exits.	D2D5 & D2D6
6.	Level 1 Fire Stair 8: Permit the fire stair to serve the stores area whereby the stores area does not occupy the whole storey. Fire Stair 8: Permit the fire stair discharge at ground level to pass within 6m of openings in the external wall which may not be protected in accordance with C4D5. In addition, the external wall may not provide the required FRL 60/60/60.	D2D12
7.	Permit the basement exit stairs to discharge adjacent each other at ground level in lieu of as far apart as practical.	D2D15
8.	The keg room located underneath the stair will not maintain an FRL or be separated from the remainder of the storey or the non-fire isolated stairway	D3D9
9.	The Club building will address compliance with Part E2 of the BCA with a performance-based approach to address smoke hazard management in accordance with Performance Requirement E2P2	NSW E2D19
10.	Performance Solution will be required to address weatherproofing for new external walls which contain CFC cladding which is not a DTS solution under F3D5.	F3D5 & F3P1

### 3.4 CLAUSE 64 – ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION

In addition to the requirements for new works to comply with the current provisions of BCA2022, it is necessary to review the existing building, particularly those parts which are being relied upon for the new works component and to ascertain whether any upgrading is required to satisfy Sections 62 & 64 of the Environmental Planning and Assessment Regulation 2021.

The proposed development involves alterations to the existing building, therefore Clause 64 will apply.

The proposed alterations and additions are undertaken to substantial part of the club building and the overall works would be considered to be more than 50% of the total volume of the building. This Clause would only apply, should Council consider the measures contained in the building being inadequate to: -

- i. to protect persons using the building, if there is a fire, or
- ii. to facilitate the safe egress of persons from the building, in there is a fire, or
- iii. to restrict the spread of fire from the building to other buildings nearby.

An assessment of these requirements has been undertaken below in accordance with Clause 64(2) which allows the consent authority to consider whether it is appropriate to require the existing building to be brought into total or partial conformity with the Building Code of Australia: -

- a) The proposed alterations and additions comprise a new single storey part of the building to the west and new Porte Cochere to the north entry area. Also includes internal renovation to parts of the existing club. Some minor internal works to the stores area on Level 1 and the function room will remain existing.
- b) The existing building has a good level of fire safety measures which are certified annually with the Annual Fire Safety Statement. To maintain a competent level of fire safety in accordance with the intent of the EP&A legislation and NCC, the below fire safety upgrades are considered as acceptable and appropriate relevant to the works proposed.

With reference to the above assessment, to satisfy Clause 64(1)(b), the following upgrades are recommended:

1. The whole building will comply with Part E1 of the BCA with an upgrade to fire hydrant system to AS 2419.1:2021 and fire hose reels to AS 2441:2005.
2. The whole building will address compliance with Part E2 of the BCA with a performance-based approach to address smoke hazard management in accordance with Performance Requirement E2P2.
3. The whole building will upgrade exit signage and emergency lighting to comply with Part E4 of the BCA.
4. The existing Club building has an EWIS system. To maintain compliance the whole Club building will be provided with EWIS to Clause E4D9 and AS 1670.4:2018.
5. Stair 1 to Bong Bong Road – the steel mezzanine structure around the stair is to be demolished and removed. There is to be no storage within the non-fire isolated stair area. The balustrade is to be upgraded to comply with Part D3 of BCA 2022. The stair shall be provided with stair nosings in accordance with D3D14 and D4D3(a)(ii). The bottom 2 x tread flight shall be assessed and where the risers and goings are not consistent they flight shall be upgraded to comply with D3D14.
6. Ground Floor double exit door which leads into Stair 1 shall be assessed and where the exit door threshold is not consistent with D3D16, it shall be upgraded to comply with D3D16 of BCA 2022.
7. Stair 2 – the existing stair has a keg room below the stair which is an enclosed room which is not a fire rated room as required by D3D9. This will be addressed with a Performance Solution to address Performance Requirements C1P2 & D1P4.
8. Level 1 & 2 Store/Plant Areas: The existing stair did not provide continuous egress to open space. As such, the stair will be upgraded to become a fire-isolated stair to serve Level 1&2 with discharge at Ground Floor. The upgrade to a fire-isolated stair greatly improves the safety of staff / maintenance personnel in these BOH areas. The design of the fire-isolated stair will also require two Performance Solutions as noted in Part 3.3 of the Report to satisfy the relevant Performance Requirements.

# Annexures

## Annexure A - Design Documentation

This report has been based on the following design documentation.

Table 2: Architectural Plans

Architectural Plans Prepared by Altis Architecture – Dated 20.06.2024		
Drawing Number	Revision	Title
DA0000	A	COVER PAGE
DA0001	A	SITE PLAN
DA0002	A	SITE ANALYSIS
DA1000	A	EXISTING DEMOLITION BASEMENT PLAN – ZONE A
DA1001	A	EXISTING DEMOLITION GROUND FLOOR PLAN – ZONE A
DA1002	A	EXISTING DEMOLITION GROUND FLOOR PLAN – ZONE B
DA1003	A	EXISTING DEMOLITION LEVEL 1 PLAN – ZONE A
DA1004	A	EXISTING DEMOLITION LEVEL 2 PLAN – ZONE A
DA1005	A	EXISTING DEMOLITION ROOF PLAN – ZONE A
DA1100	A	BASEMENT PLAN – ZONE A
DA1101	A	GROUND FLOOR PLAN – ZONE A
DA1102	A	GROUND FLOOR PLAN – ZONE B
DA1103	A	LEVEL 1 PLAN – ZONE A
DA1104	A	LEVEL 1 PLAN – ZONE B
DA1105	A	LEVEL 2 PLAN (PLANT ROOM) – ZONE A
DA1106	A	ROOF PLAN – ZONE A
DA2100	A	PROPOSED OVERALL ELEVATIONS
DA2101	A	PROPOSED ELEVATIONS – ZONE A
DA2102	A	PROPOSED ELEVATIONS – ZONE A
DA2103	A	PROPOSED ELEVATIONS – ZONE B
DA3000	A	PROPOSED SECTIONS – ZONE A
DA3001	A	PROPOSED SECTIONS – ZONE A
DA3002	A	PROPOSED SECTIONS – ZONE B

## Annexure 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.

### Club Building: Proposed Works

Table 3: Essential Fire Safety Measures

Item	Essential Fire and Other Safety Measures	Standard of Performance
<b>Fire Resistance (Floors – Walls – Doors – Shafts)</b>		
1.	Construction Joints	<b>BCA2022 C2D2, Specification 5</b> <b>BCA2022 C4D16</b> AS 1530.4:2014 & AS 4072.1:2005
2.	Fire doors	<b>BCA2022 C3D14</b> (Electricity Supply Systems) <b>BCA2022 C4D5</b> (Acceptable methods of Protection) <b>BCA2022 C4D6</b> (Doors in Fire Walls) <b>BCA2022 C4D9</b> (Openings in Fire Isolated Exits) <b>BCA2022 C4D14</b> (Opening in Shafts) <b>BCA2022 D2.8</b> (Enclosure of Space under Stairs) Specification 12 & AS1905.1: 2015 <b>BCA2022 C4D11</b> (Opening in Fire Isolated Lift Shafts) & AS1735.11- 1986
3.	Fire seals protecting openings in fire resisting components of the building	<b>BCA2022 C4D15</b> (Openings for service installations) <b>BCA2022 C4D16</b> (Construction joints) <b>BCA2022 Specification 13</b> AS1530.4:2014 & AS4072.1-2005
4.	Lightweight construction	<b>BCA2022 C2D2, Specification 5</b> <b>BCA2022 C2D9, Specification 6</b> AS1530.4:2014
<b>General</b>		
5.	Portable fire extinguishers	<b>BCA2022 E1D14</b> AS 2444–2001
6.	Warning & operational signs	<b>BCA2022 D3D28</b> (Signs on Fire Doors) <b>BCA2022 D4D7</b> (Braille Exit Signs) (Note: E4D5 (Exit Signs)) <b>BCA2022 E3D4</b> (Lift Signs)



Item	Essential Fire and Other Safety Measures	Standard of Performance
<b>Electrical Services</b>		
7.	Automatic fail safe devices + Auto open Sliding Exit doors + Break Glass release	<b>BCA2022 D3D26</b> (Operation of Latches) <b>BCA2022 D3D27</b> (Re-entry from fire-isolated stairs) AS1670.1:2018 (Fire)
8.	Automatic fire detection & alarm: + Clause S20C4 – AS 1670.1:2018 system throughout the building connected to a BOWS	<b>BCA2022 NSW Part E2D16 &amp; E2D19</b> <b>BCA2022 S20C4</b> (Smoke detection system) <b>BCA2022S20C6</b> (Smoke detection for smoke control systems) <b>BCA2022S20C7</b> (BOWS) <b>BCA2022S20C8</b> (System Monitoring) AS 1670.1:2018 (Amdt 1) AS 1670.4:2018 (Amdt 1)
9.	Emergency lighting	<b>BCA2022 E4D2, E4D4</b> AS/NZS 2293.1:2018
10.	Exit signs	<b>BCA2022 E4D55</b> (Exit Signs) <b>BCA2022 E4D6</b> (Direction Signs) <b>BCA2022 E4D8</b> (Design and Operation - Exits) AS/NZS 2293.1:2018
11.	Emergency warning and intercom system (EWIS)	<b>BCA2022 E4D9</b> AS 1670.4:2018 (EWIS)
12.	System Monitoring + For smoke exhaust systems and smoke-and-heat vents	<b>BCA2022 S20C8</b> AS 1670.3:2018
<b>Hydraulic Services</b>		
13.	Fire hydrant systems + NSW Storz Couplings	<b>BCA2022 E1D2</b> AS 2419.1:2021 FRNSW Technical Sheet D15/45534.V9 issued 10.01.19, 'Compatible Hose Connections'
14.	Hose reel systems	<b>BCA2022 E1D3</b> AS 2441:2005
<b>Mechanical Services</b>		
15.	Fire dampers	<b>BCA2022 C4D16</b> AS 1668.1:2015 (Amdt 1) AS 1682.1:2015 & AS 1682.2:2015
16.	Mechanical air handling systems 1. Smoke Hazard Management – addressed with a Performance Solutions	<b>BCA2022 NSW E2D16 &amp; NSW E2D19</b> AS 1668.1:2015 (Amdt 1) Fire Engineering Report – to be prepared at CC stage

Item	Essential Fire and Other Safety Measures	Standard of Performance
	<p>2. Auto-shutdown of Air-handling System.</p> <p>+ (NSW E2D16) - Any system in a Class 9b assembly building which does not form part of a smoke hazard management system, other than:</p> <p>+ non-ducted individual room units with a capacity of not more than 1000 L/s; or</p> <p>+ miscellaneous exhaust are systems installed as per Section 5 and 6 of AS 1668.1:2015.</p>	
<b>E2D3 General Requirements</b> <ol style="list-style-type: none"> <li>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— <ol style="list-style-type: none"> <li>a. to operate as a smoke control system in accordance with AS 1668.1; or</li> <li>b. such that it— <ol style="list-style-type: none"> <li>i. incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and</li> <li>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.</li> </ol> </li> </ol> </li> <li>2. For the purposes of (1), each sole-occupancy unit in a Class 2 or 3 building is treated as a separate fire compartment.</li> <li>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.</li> </ol>		

**Car Park Building:**

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.

Item	Essential Fire and Other Safety Measures	Standard of Performance
<b>Fire Resistance (Floors – Walls – Doors – Shafts)</b>		
1.	Fire doors	<b>BCA2022 C3D14</b> (Electricity Supply Systems) <b>BCA2022 C4D5</b> (Acceptable methods of Protection) Specification 12 & AS1905.1: 2015
2.	Fire seals protecting openings in fire resisting components of the building	<b>BCA2022 C4D15</b> (Openings for service installations) <b>BCA2022 C4D16</b> (Construction joints) <b>BCA2022 Specification 13</b> AS1530.4:2014 & AS4072.1-2005
<b>General</b>		
3.	Portable fire extinguishers	<b>BCA2022 E1D14</b> AS 2444-2001
4.	Warning & operational signs	<b>BCA2022 D4D7</b> (Braille Exit Signs) (Note: E4D5 (Exit Signs)) <b>BCA2022 E3D4</b> (Lift Signs)
<b>Electrical Services</b>		
5.	Automatic fire detection & alarm:	<b>BCA2022 E1D9 &amp; E1D4</b> <b>BCA2022S20C7</b> (BOWS) AS 1670.1:2018 (Amdt 1) AS 1670.3:2018 (Amdt 1)
6.	Emergency lighting	<b>BCA2022 E4D2, E4D4</b> AS/NZS 2293.1:2018
7.	Exit signs	<b>BCA2022 E4D5</b> (Exit Signs) <b>BCA2022 E4D6</b> (Direction Signs) <b>BCA2022 E4D8</b> (Design and Operation - Exits) AS/NZS 2293.1:2018
<b>Hydraulic Services</b>		
8.	Automatic fire suppression systems	<b>BCA2022 E1D4, E1D9</b> <b>BCA2022 Specification 17</b> AS 2118.1:2017 (Amdt 1)

Item	Essential Fire and Other Safety Measures	Standard of Performance
9.	Fire hydrant systems + NSW Storz Couplings	<b>BCA2022 E1D2</b> AS 2419.1:2021 FRNSW Technical Sheet D15/45534.V9 issued 10.01.19, 'Compatible Hose Connections'
10.	Hose reel systems	<b>BCA2022 E1D3</b> AS 2441:2005
<b>Mechanical Services</b>		
11.	Mechanical air handling systems ➤ Mechanical ventilation to carpark.	<b>BCA2022 E2D12</b> AS 1668.1:2015 (Amdt 1)

## Annual Fire Safety Statement

The following fire safety measures are provided in the Club Building:

### Section 4: Fire safety measures

Fire safety measure	Minimum standard of performance	Date(s) assessed	APFS *
Automatic fire detection & alarm systems	BCA E2.2a & AS1670.1 - 2004, AS1670.1 - 2015	26/07/23	F053496A
Emergency lighting	BCA E4.2, E4.4 & AS2293.1 - 1998, AS2293.1 - 2005	10/07/23	F018861A
Emergency warning and intercommunication systems	BCA E4.9 & AS1670.4 - 2004, AS4428.4 - 2004	26/07/23	F053496A
Exit Signs	BCA E4.5, E4.6, E4.8 & AS2293.1 - 1998, AS2293.1 - 2005	10/07/23	F018861A
Fire alarm monitoring	AS4428.6 - 1997, AS3013 - 1995, AS1670.3 - 2004	03/08/23	F053496A
Fire doors	BCA C3.4 & AS1905.1 - 1997	26/07/23	F053496A
Fire hydrant systems	BCA E1.3 & AS2419.1 - 1994, AS2419.1 - 2005	03/08/23	F053496A
Fire shutters	AS1905.2 - 1989	26/07/23	F053496A
Hose reel systems	BCA E1.4 & AS2441 - 1988, AS2441 - 2005	03/08/23	F053496A
Portable fire extinguishers	BCA E1.6 & AS2444 - 2001	03/08/2023	F053496A
Mechanical air handling systems	BCA E2.2, E2.3 & AS/NZS1668.1 - 1998, AS1668.2 - 1991	6/7/23	F054900A
Fire seals protecting openings in fire resisting components of the building	BCA C3.15 & AS1530.4 & AS4072.1 - 2005	26/07/23	F053496A
Smoke detectors and heat detectors	BCA E2.2 & AS1670.1 - 2004 & AS1670.1 - 2015	26/07/23	F053496A
Fire dampers	AS/NZS1668.1 - 1998	26/7/23	F054900A
Smoke control systems	BCA E2.2 & AS/NZS1668.1 - 1998	26/7/23	F054900A

## Annexure 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 B Construction – Club Building

Table 4: Type B Construction

Table S5C21a: Type B construction: FRL of loadbearing parts of external walls

Distance from a fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 Part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/60/30	120/90/60	180/120/90	240/180/120
3m to less than 9 m	90/30/30	120/30/30	180/90/60	240/90/60
9 m to less than 18 m	90/30/-	120/30/-	180/60/-	240/60/-
18 m or more	-/-/-	-/-/-	-/-/-	-/-/-

Table S5C21b: Type B construction: FRL of non-loadbearing parts of external walls

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

Table S5C21c: Type B construction: FRL of external columns not incorporated in an external wall

Distance from a fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 Part	Class 5, 7a or 9	Class 6	Class 7b or 8



Loadbearing column – less than 18 m	90/-/-	120/-/-	180/-/-	240/-/-
Loadbearing column – 18m or more	-/-/-	-/-/-	-/-/-	-/-/-
Non-loadbearing column	-/-/-	-/-/-	-/-/-	-/-/-

Table S5C21d: Type B construction: FRL of common walls and fire walls

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

Table S5C21e: Type B construction: FRL of loadbearing internal walls

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 Part	Class 5, 7a or 9	Class 6	Class 7b or 8
Fire-resisting lift and stair shafts	90/90/90	120/120/120	180/120/120	240/120/120
Bounding public corridors, public lobbies and the like	60/60/60	120/-/-	180/-/-	240/-/-
Between or bounding sole-occupancy units	60/60/60	120/-/-	180/-/-	240/-/-

Table S5C21f: Type B construction: FRL of non-loadbearing internal walls

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 Part	Class 5, 7a or 9	Class 6	Class 7b or 8
Fire-resisting lift and stair shafts	-/90/90	-/120/120	-/120/120	-/120/120
Bounding public corridors, public lobbies and the like	-/60/60	-/-/-	-/-/-	-/-/-

Between or bounding sole-occupancy units	-/60/60	-/-/-	-/-/-	-/-/-
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Table S5C21g: Type B construction: FRL of other building elements not covered by Tables S5C21a to S5C21f

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 Part	Class 5, 7a or 9	Class 6	Class 7b or 8
Other loadbearing internal walls and columns	60/-/-	120/-/-	180/-/-	240/-/-
Roofs	-/-/-	-/-/-	-/-/-	-/-/-

S5C21(f): In a Class 2 or 3 building, except where within the one sole-occupancy unit, or a Class 9a health-care building or a Class 9b building, a floor separating storeys or above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, must—

- i. be constructed so that it is at least of the standard achieved by 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; and

## Type C Construction – Car Park Building

Table 5: Type C Construction

Table S5C24a: Type C construction: FRL of parts of external walls

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

Table S5C24b: Type C construction: FRL of external columns not incorporated into an external wall

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

Table S5C24c: Type C construction: FRL of common walls and fire walls

Wall Type	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 Part	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing or non-loadbearing	90/90/90	90/90/90	90/90/90	90/90/90

Table S5C24d: Type C construction: FRL of internal walls

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 Part	Class 5, 7a or 9	Class 6	Class 7b or 8

Bounding public corridors, public lobbies and the like	60/60/60	-/-/-	-/-/-	-/-/-
Between or bounding sole-occupancy units	60/60/60	-/-/-	-/-/-	-/-/-
Bounding a stair if required to be rated	60/60/60	60/60/60	60/60/60	60/60/60

Table S5C24e: Type C construction: FRL of roof

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 Part	Class 5, 7a or 9	Class 6	Class 7b or 8
Roofs	-/-/-	-/-/-	-/-/-	-/-/-

Note: An external wall that is required to have an FRL need only be tested from the outside to satisfy the FRL requirement.

## Annexure D - Detailed BCA 2022 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.

<b>N/A</b>	Not Applicable. The Deemed-to-Satisfy clause is not applicable to the proposed design.
<b>Complies</b>	The relevant provisions of the Deemed-to-Satisfy clause have been satisfied by the proposed design.
<b>CRA – Refer Annexure F</b>	'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 Annexure F of this report.
<b>FI</b>	Further Information is necessary to determine the compliance potential of the building design.
<b>PS</b>	Performance Solution with respect to this Deemed-to-Satisfy Provision is necessary to satisfy the relevant Performance Requirements.
<b>DNC</b>	Does Not Comply.
<b>Noted</b>	BCA Clause simply provides a statement not requiring specific design comment or confirmation.
<b>Base Building</b>	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
<b>Part B1 – Structural Provisions</b>  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 at DA stage.			

### SECTION C: FIRE RESISTANCE

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
<b>Part C1 – Fire Resistance</b>			
Part C1 contains the Objectives, Functional Statements, Performance Requirements and Verification methods applicable to that part.			Noted



Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
<b>Part C2 – Fire Resistance and Stability</b>			
C2D1: Deemed-to-Satisfy Provisions [2019: C1.0]	Informational	Noted	Noted
C2D2: Type of construction required [2019: C1.1]	<p>(1) The minimum Type of fire-resisting construction of a building must be determined in accordance with Table C2D2, except as allowed for—</p> <p>(a) certain Class 2, 3 or 9c buildings, in C2D6; and</p> <p>(b) a Class 4 part of a building located on the top storey, in C2D4(2); and</p> <p>(c) open spectator stands and indoor sports stadiums, in C2D8.</p> <p>(2) Each building element must comply with Specification 5 as applicable.</p>	<p>The club building is required to be of Type B construction.</p> <p>The car park building is required to be of Type C construction.</p> <p>Refer to Specification 5 at the end of this section for specific requirements.</p>	CRA – Refer Annexure F
C2D3: Calculation of rise in storeys [2019: C1.2]	<p>(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—</p> <p>(a) above the finished ground next to that part; or</p> <p>(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.</p> <p>(2) A storey is not counted if—</p>	<p>Club building has a rise in storeys of two.</p> <p>Car park Building has a rise in storeys of one.</p> <p>Refer Part 2.2 of Report.</p>	Noted

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(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</p> <p>(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.</p> <p>(3) In a Class 7 or 8 building, a storey that has an average internal height of more than 6 m is counted as—</p> <p>(a) one storey if it is the only storey above the ground; or</p> <p>(b) 2 storeys in any other case.</p>		
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.	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]		This clause is not applicable to the subject building	NA

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
C2D7: Class 4 Parts of building [2019: C1.6]		This clause is not applicable to the subject building	NA
C2D8: Open spectator stands and indoor sports stadium [2019: C1.7]		This clause is not applicable to the subject building	NA
C2D9: Lightweight construction [2019: C1.8]	<p>(1) Lightweight construction must comply with Specification 6 if it is used in a wall system—</p> <p>(a) that is required to have an FRL; or</p> <p>(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.</p> <p>(2) If lightweight construction is used for the fire-resisting covering of a steel column or the like, and if—</p> <p>(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</p> <p>(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.</p>	This is a design criteria required to be verified by manufacturers details / certification.	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
<p>C2D10: Non-combustible building elements</p> <p>[2019: C1.9]</p>	<p>(1) In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible:</p> <p>(a) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation.</p> <p>(b) The flooring and floor framing of lift pits.</p> <p>(c) Non-loadbearing internal walls where they are required to be fire-resisting.</p> <p>(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—</p> <p>(a) a building required to be of Type A construction; and</p> <p>(b) a building required to be of Type B construction, subject to C3D11, in—</p> <p>(i) a Class 2, 3 or 9 building; and</p> <p>(ii) a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys.</p> <p>(3) A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shaft, must comply with Specification 5.</p> <p>(4) The requirements of (1) and (2) do not apply to the following:</p>	<p>Club Building - Subject to further review at CC stage</p>	<p>CRA – Refer Annexure F</p>

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<ul style="list-style-type: none"> <li>(a) Gaskets.</li> <li>(b) Caulking.</li> <li>(c) Sealants.</li> <li>(d) Termite management systems.</li> <li>(e) Glass, including laminated glass, and associated adhesives, including tapes.</li> <li>(f) Thermal breaks associated with— <ul style="list-style-type: none"> <li>(i) glazing systems; or</li> <li>(ii) external wall systems, where the thermal breaks— <ul style="list-style-type: none"> <li>(A) are no larger than necessary to achieve thermal objectives; and</li> <li>(B) do not extend beyond one storey; and</li> <li>(C) do not extend beyond one fire compartment.</li> </ul> </li> </ul> </li> <li>(g) Damp-proof courses.</li> <li>(h) Compressible fillers and backing materials, including those associated with articulation joints, closing gaps not wider than 50 mm.</li> <li>(i) Isolated— <ul style="list-style-type: none"> <li>(i) construction packers and shims; or</li> </ul> </li> </ul>		

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(ii) blocking for fixing fixtures; or</p> <p>(iii) fixings, including fixing accessories; or</p> <p>(iv) acoustic mounts.</p> <p>(j) Waterproofing materials applied to the external face, used below ground level and up to 250 mm above ground level.</p> <p>(k) Joint trims and joint reinforcing tape and mesh of a width not greater than 50 mm.</p> <p>(l) Weather sealing materials, applied to gaps not wider than 50 mm, used within and between concrete elements.</p> <p>(m) Wall ties and other masonry components complying with AS 2699 Part 1 and Part 3 as appropriate, and associated with masonry wall construction.</p> <p>(n) Reinforcing bars and associated minor elements that are wholly or predominately encased in concrete or grout.</p> <p>(o) A paint, lacquer or a similar finish or coating.</p> <p>(p) Adhesives, including tapes, associated with stiffeners for cladding systems.</p> <p>(q) Fire-protective materials and components required for the protection of penetrations.</p>		

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(5) The following materials, when entirely composed of itself, are non-combustible and may be used wherever a non-combustible material is required:</p> <ul style="list-style-type: none"><li>(a) Concrete.</li><li>(b) Steel, including metallic coated steel.</li><li>(c) Masonry, including mortar.</li><li>(d) Aluminium, including aluminium alloy.</li><li>(e) Autoclaved aerated concrete, including mortar.</li><li>(f) Iron.</li><li>(g) Terracotta.</li><li>(h) Porcelain.</li><li>(i) Ceramic.</li><li>(j) Natural stone.</li><li>(k) Copper.</li><li>(l) Zinc.</li><li>(m) Lead.</li><li>(n) Bronze.</li><li>(o) Brass.</li></ul>		

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(6) The following materials may be used wherever a non-combustible material is required:</p> <ul style="list-style-type: none"> <li>(a) Plasterboard.</li> <li>(b) Perforated gypsum lath with a normal paper finish.</li> <li>(c) Fibrous-plaster sheet.</li> <li>(d) Fibre-reinforced cement sheeting.</li> <li>(e) Pre-finished metal sheeting having a combustible surface finish not exceeding 1 mm thickness and where the Spread-of-Flame Index of the product is not greater than 0.</li> <li>(f) Sarking-type materials that do not exceed 1 mm in thickness and have a Flammability Index not greater than 5.</li> <li>(g) Bonded laminated materials where— <ul style="list-style-type: none"> <li>(i) each lamina, including any core, is non-combustible; and</li> <li>(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</li> <li>(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</li> </ul> </li> </ul>		



Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	(iv) when located externally, are fixed in accordance with C2D15.		
C2D11: Fire hazard properties  [2019: C1.10]	<p>(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:</p> <p>(a) Floor linings and floor coverings.</p> <p>(b) Wall linings and ceiling linings.</p> <p>(c) Air-handling ductwork.</p> <p>(d) Lift cars.</p> <p>(e) In Class 9b buildings used as a theatre, public hall or the like—</p> <p>(i) fixed seating in the audience area or auditorium; and</p> <p>(ii) a proscenium curtain required by Specification 32.</p> <p>(f) Escalators, moving walkways and non-required non fire-isolated stairways or pedestrian ramps subject to Specification 14.</p> <p>(g) Sarking-type materials.</p> <p>(h) Attachments to floors, ceilings, internal walls, common walls, fire walls and to internal linings of external walls.</p> <p>(i) Other materials including insulation materials other than sarking-type materials.</p>	Subject to further review at CC stage	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(2) Paint or fire-retardant coatings must not be used to achieve compliance with the required fire hazard properties.</p> <p>(3) The requirements of (1) do not apply to a material or assembly if it is—</p> <ul style="list-style-type: none"> <li>(a) plaster, cement render, concrete, terrazzo, ceramic tile or the like; or</li> <li>(b) a fire-protective covering; or</li> <li>(c) a timber-framed window; or</li> <li>(d) a solid timber handrail or skirting; or</li> <li>(e) a timber-faced door; or</li> <li>(f) an electrical switch, socket-outlet, cover plate or the like; or</li> <li>(g) a material used for— <ul style="list-style-type: none"> <li>(i) a roof insulating material applied in continuous contact with a substrate; or</li> <li>(ii) an adhesive; or</li> <li>(iii) a damp-proof course, flashing, caulking, sealing, ground moisture barrier, or the like; or</li> </ul> </li> <li>(h) a paint, varnish, lacquer or similar finish, other than nitro-cellulose lacquer; or</li> </ul>		

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(i) a clear or translucent roof light of glass fibre-reinforced polyester if—</p> <p>(i) the roof in which it is installed forms part of a single storey building required to be Type C construction; and</p> <p>(ii) the material is used as part of the roof covering; and</p> <p>(iii) it is not closer than 1.5 m from another roof light of the same type; and</p> <p>(iv) each roof light is not more than 14 m<sup>2</sup> in area; and</p> <p>(v) the area of the roof lights per 70 m<sup>2</sup> of roof surface is not more than 14 m<sup>2</sup>; or</p> <p>(j) a face plate or neck adaptor of supply and return air outlets of an air handling system; or</p> <p>(k) a face plate or diffuser plate of light fitting and emergency exit signs and associated electrical wiring and electrical components; or</p> <p>(l) a joinery unit, cupboard, shelving, or the like; or</p> <p>(m) an attached non-building fixture and fitting such as—</p> <p>(i) a curtain, blind, or similar decor, other than a proscenium curtain required by Specification 32; and</p>		

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(ii) a whiteboard, window treatment or the like; or</p> <p>(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</p> <p>(o) any other material that does not significantly increase the hazards of fire.</p>		
<p>C2D12: Performance of external walls in fire</p> <p>[2019: C1.11]</p>	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.	Subject to further review at CC stage – car park building external walls are noted as insitu concrete.	CRA – Refer Annexure F
<p>C2D13: Fire-protected timber: Concession</p> <p>[2019: C1.13]</p>		This clause is not applicable to the subject building	NA
<p>C2D14: Ancillary elements</p> <p>[2019: C1.14]</p>	<p>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:</p> <p>(a) An ancillary element that is non-combustible.</p> <p>(b) A gutter, downpipe or other plumbing fixture or fitting.</p>	Club Building - Subject to further review at CC stage	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(c) A flashing.</p> <p>(d) A grate, grille or similar cover not more than 2 m2 in area associated with a building service.</p> <p>(e) An electrical switch, socket-outlet, cover plate or the like.</p> <p>(f) A light fitting.</p> <p>(g) A required sign.</p> <p>(h) A sign other than one provided under (a) or (g) that—</p> <p style="padding-left: 40px;">(i) achieves a group number of 1 or 2; and</p> <p style="padding-left: 40px;">(ii) does not extend beyond one storey; and</p> <p style="padding-left: 40px;">(iii) does not extend beyond one fire compartment; and</p> <p style="padding-left: 40px;">(iv) is separated vertically from other signs permitted under (h) by at least 2 storeys.</p> <p>(i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that—</p> <p style="padding-left: 40px;">(i) meets the relevant requirements of Table S7C7 as for an internal element; and</p> <p style="padding-left: 40px;">(ii) serves a storey—</p> <p style="padding-left: 80px;">(A) at ground level; or</p>		

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(B) immediately above a storey at ground level; and</p> <p>(iii) does not serve an exit, where it would render the exit unusable in a fire.</p> <p>(j) A part of a security, intercom or announcement system.</p> <p>(k) Wiring.</p> <p>(l) Waterproofing material installed in accordance with AS 4654.2 and applied to an adjacent floor surface, including vertical upturn, or a roof surface.</p> <p>(m) Collars, sleeves and insulation associated with service installations.</p> <p>(n) Screens applied to vents, weepholes and gaps complying with AS 3959.</p> <p>(o) Wiper and brush seals associated with doors, windows or other openings.</p> <p>(p) A gasket, caulking, sealant or adhesive directly associated with (a) to (o).</p>		
<p>C2D15: Fixing of Bonded Laminated Cladding Panels</p> <p>[New for 2022]</p>	<p>(1) In a building required to be of Type A or B construction, externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame.</p> <p>(2) An externally located bonded laminated cladding panel need not comply with (1) if it is one of the following:</p>	Subject to further review at CC stage	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	(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.	Car park building – ground floor has AS 2118.1 sprinkler system. Car park building – Level 1 is an open deck car park. Therefore C3D3 does not apply.	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	Club Building – basement fire compartment complies. Club Building – Level 1 fire compartment complies. Club Building: Ground Floor fire compartment exceeds 5,500m2 and will be addressed via a Performance Solution	<b>PS</b> <b>Refer Part 3.3 of Report</b>

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	units is not counted in the floor area or volume of a fire compartment or atrium if it is situated at the top of the building.	which permits the building to exceed limitations in C3D3 without the requirement for compliance with C3D4.	
C3D4: Large isolated buildings [2019: C2.3]		This clause is not applicable to the subject building	NA
C3D5: Requirements for open spaces and vehicular access [2019: C2.4]		This clause is not applicable to the subject building	NA
C3D6: Class 9 Buildings [2019: C2.5]		This clause is not applicable to the subject building	NA
C3D7: Vertical separation of openings in external walls [2019: C2.6]	Spandrels are required to buildings of Type A construction only.	The proposed buildings are not of Type A construction; therefore spandrels are not required.	NA
C3D8: Separation by fire walls [2019: C2.7]	<p>(1) Construction — A fire wall must be constructed in accordance with the following:</p> <p>(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.</p> <p>(b) Any openings in a fire wall must not reduce the FRL required by Specification 5 for the fire wall, except</p>	The proposed development includes a new Porte Cochere covered area to connect between the club building and the car park building. Refer to Figure 1 in Part 2 of Report. This is considered to create a connection between the two buildings, thus creating one united building. However, the two buildings will be assessed as separate buildings via a Performance Solution. Whilst acknowledging the Porte Cochere provides connection between the buildings, the Performance Solution will rationalise the omission of fire walls to separate buildings as noted under Clause C3D8 due to the open nature of the Porte Cochere and assess the	<b>PS</b>  <b>Refer Part 3.3 of Report</b>



Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>where permitted by the Deemed-to-Satisfy Provisions of Part C4.</p> <p>(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.</p> <p>(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:</p> <p>(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.</p> <p>(b) The fire wall is carried through to the underside of the roof covering.</p> <p>(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—</p> <p>(i) the covering of the higher roof, or not less than 6 m above the covering of the lower roof; or</p> <p>(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</p> <p>(iii) the lower roof if its covering is non-combustible and the lower part has a sprinkler system (other</p>	<p>building as separate buildings under the provisions of BCA 2022.</p>	

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>than a FPAA101D or FPAA101H system) complying with Specification 17.</p> <p>(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—</p> <p>(a) a floor having an FRL required for a fire wall; or</p> <p>(b) the roof covering.</p>		
C3D9: Separation of classifications in the same storey [2019: C2.8]		This clause is not applicable to the subject building	NA
C3D10: Separation of classifications in different storeys [2019: C2.9]		This clause is not applicable to the subject building	NA
C3D11: Separation of lift shafts [2019: C2.10]	<p>(1) Any lift connecting more than 2 storeys, or more than 3 storeys if the building is sprinklered, (other than lifts which are wholly within an atrium) must be separated from the remainder of the building by enclosure in a shaft in which—</p> <p>(a) in a building required to be of Type A construction — the walls have the relevant FRL prescribed by Specification 5; and</p> <p>(b) in a building required to be of Type B construction — the walls—</p>	<p>Club Building: Lift which connects Basement, Ground Floor and Level 1 shall have FRL 120/120/120.</p> <p>Club Building: Lift which connects basement to loading dock is required to be fire rated shaft to keep separate fire compartments and shall have FRL 120/120/120.</p> <p>Car Park Building: Not required to comply with this clause.</p>	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(i) if loadbearing, have the relevant FRL prescribed by Table S5C21e; or</p> <p>(ii) if non-loadbearing, be of non-combustible construction.</p> <p>(4) Openings for lift landing doors and services must be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4.</p>		
<p>C3D12: Stairways and lifts in one shaft</p> <p>[2019: C2.11]</p>	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.	Complies	Complies
<p>C3D13: Separation of equipment</p> <p>[2019: C2.12]</p>	<p>(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—</p> <p>(a) lift motors and lift control panels; or</p> <p>(b) emergency generators used to sustain emergency equipment operating in the emergency mode; or</p> <p>(c) central smoke control plant; or</p> <p>(d) boilers; or</p> <p>(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.</p>	Subject to further review at CC stage	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(2) Equipment need not be separated in accordance with (1) if the equipment comprises—</p> <p>(a) smoke control exhaust fans located in the air stream which are constructed for high temperature operation in accordance with Specification 21; or</p> <p>(b) stair pressurising equipment installed in compliance with the relevant provisions of AS 1668.1; or</p> <p>(c) a lift installation without a machine-room; or</p> <p>(d) equipment otherwise adequately separated from the remainder of the building.</p> <p>(3) Separation of on-site fire pumps must comply with the requirements of AS 2419.1.</p> <p>(4) Separating construction must have—</p> <p>(a) except as provided by (b)—</p> <p>(i) an FRL as required by Specification 5, but not less than 120/120/120; and</p> <p>(ii) any doorway protected with a self-closing fire door having an FRL of not less than –/120/30; or</p> <p>(b) when separating a lift shaft and lift motor room, an FRL not less than 120/–/–.</p>		
C3D14: Electricity supply system [2019: C2.13]	(1) An electricity substation located within a building must—	Both Buildings - Subject to further review at CC stage	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(a) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and</p> <p>(b) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30.</p> <p>(2) A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must—</p> <p>(a) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and</p> <p>(b) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30.</p> <p>(3) Subject to (4), electrical conductors must—</p> <p>(a) have a classification in accordance with AS/NZS 3013 of not less than—</p> <p>(i) if located in a position that could be subject to damage by motor vehicles — WS53W; or</p> <p>(ii) otherwise — WS52W; or</p> <p>(b) be enclosed or otherwise protected by construction having an FRL of not less than 120/120/120.</p> <p>(4) The requirements of (3) only apply to electrical conductors located within a building that supply—</p>		

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(a) a substation located within the building which supplies a main switchboard covered by (2); or</p> <p>(b) a main switchboard covered by (2).</p> <p>(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 separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear.</p> <p>(6) For the purposes of (5), emergency equipment includes but is not limited to the following:</p> <p>(a) Fire hydrant booster pumps.</p> <p>(b) Pumps for automatic sprinkler systems, water spray, chemical fluid suppression systems or the like.</p> <p>(c) Pumps for fire hose reels where such pumps and fire hose reels form the sole means of fire protection in the building.</p> <p>(d) Air handling systems designed to exhaust and control the spread of fire and smoke.</p> <p>(e) Emergency lifts.</p> <p>(f) Control and indicating equipment.</p> <p>(g) Emergency warning and intercom systems.</p>		

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
C3D15: Public corridors in Class 2 and 3 Buildings [2019: C2.14]		This clause is not applicable to the subject building	NA
Part C4 – Protection of Openings			
C4D1: Deemed-to-Satisfy Provisions [2019: C3.0]	Informational	Noted	Noted
C4D2: Application of Part [2019: C3.1]	<p>(1) The Deemed-to-Satisfy Provisions of this Part do not apply to the following:</p> <p>(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.</p> <p>(b) Non-combustible ventilators for subfloor or cavity ventilation, if each does not exceed 45 000 mm<sup>2</sup> in face area and is spaced not less than 2 m from any other ventilator in the same wall.</p> <p>(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.</p>	<p>Openings in the vertical plane at the perimeter of the Porte Cochere are exempt under (1)(c).</p> <p>Car park building is a single fire compartment and the openings for service penetrations and vehicle ramps are exempt.</p>	Noted

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(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:</p> <p>(i) Service penetrations.</p> <p>(ii) Openings formed by a vehicle ramp.</p> <p>(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 of the Deemed-to-Satisfy Provisions of Sections C, D and E.</p> <p>(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.</p> <p>(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.</p>		
C4D3: Protection of openings in external walls [2019: C3.2]		This clause is not applicable to the subject building	NA



Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
C4D4: Separation of external walls and associated openings in different fire compartments [2019: C3.3]		This clause is not applicable to the subject building	NA
C4D5: Acceptable methods of protection [2019: C3.4]	<p>(1) Where protection is required, doorways, windows and other openings must be protected as follows:</p> <p>(a) Doorways—</p> <p>(i) internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or</p> <p>(ii) –/60/30 fire doors that are self-closing or automatic closing.</p> <p>(b) Windows—</p> <p>(i) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or</p> <p>(ii) –/60/– fire windows that are automatic closing or permanently fixed in the closed position; or</p> <p>(iii) –/60/– automatic closing fire shutters.</p> <p>(c) Other openings—</p> <p>(i) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or</p>	Subject to further review at CC stage	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(ii) construction having an FRL not less than –/60/-</p> <p>(2) Fire doors, fire windows and fire shutters must comply with Specification 12.</p>		
<p>C4D6: Doorways in fire walls</p> <p>[2019: C3.5]</p>	<p>(1) The aggregate width of openings for doorways in a fire wall, which are not part of a horizontal exit, must not exceed <math>\frac{1}{2}</math> of the length of the fire wall, and each doorway must be protected by—</p> <p>(a) 2 fire doors or fire shutters, one on each side of the doorway, each of which has an FRL of not less than <math>\frac{1}{2}</math> 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</p> <p>(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</p> <p>(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.</p> <p>(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).</p> <p>(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</p>	<p>Subject to further review at CC stage</p>	<p>CRA – Refer Annexure F</p>

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>1670.1 and located on each side of the fire wall not more than 1.5 m horizontal distance from the opening.</p> <p>(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.</p>		
<p>C4D7: Sliding fire doors</p> <p>[2019: C3.6]</p>		This clause is not applicable to the subject building	NA
<p>C4D8: Protection of doorways in horizontal exits</p> <p>[2019: C3.7]</p>		This clause is not applicable to the subject building	NA
<p>C4D9: Openings in fire-isolated exits</p> <p>[2019: C3.8]</p>	<p>(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).</p> <p>(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.</p>	Stair 8 Level 1&2 exit doors to comply.	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	(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.		
C4D10: Service penetrations in fire-isolated exits [2019: C3.9]	<p>Fire-isolated exits must not be penetrated by any services other than—</p> <p>(a) electrical wiring permitted by D3D8(6) to be installed within the exit; or</p> <p>(b) ducting associated with a pressurisation system if it—</p> <p>(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</p> <p>(ii) does not open into any other part of the building; or</p> <p>(c) for fire services, water supply and test drain pipes.</p>	Subject to further review at CC stage	CRA – Refer Annexure F
C4D11: Openings in fire-isolated lift shafts [2019: C3.10]	<p>(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—</p> <p>(a) comply with AS 1735.11; and</p> <p>(b) are set to remain closed except when discharging or receiving passengers, goods or vehicles.</p>	<p>Club Building: Lift which connects Basement, Ground Floor and Level 1 shall have FRL 120/120/120 and comply with C4D11.</p> <p>Club Building: Lift which connects basement to loading dock is required to be fire rated shaft to keep separate fire compartments and shall have FRL 120/120/120 and comply with C4D11.</p> <p>Car Park Building: Not required to comply with this clause.</p>	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	(2) Lift indicator panels — A lift call panel, indicator panel or other panel in the wall of a fire-isolated lift shaft must be backed by construction having an FRL of not less than –/60/60 if it exceeds 35 000 mm <sup>2</sup> in area.		
C4D12: Bounding Construction: Class 2, 3 and 4 Buildings [2019: C3.11]		This clause is not applicable to the subject building	NA
C4D13: Openings in floors and ceilings for services [2019: C3.12]	<p>(1) Where a service passes through—</p> <p>(a) a floor that is required to have an FRL with respect to integrity and insulation; or</p> <p>(b) a ceiling required to have a resistance to the incipient spread of fire,</p> <p>(c) the service must be installed in accordance with (2).</p> <p>(2) A service must be protected—</p> <p>(a) in a building of Type A construction, by a shaft complying with Specification 5; or</p> <p>(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</p> <p>(c) in accordance with C4D15.</p> <p>(3) Where a service passes through a floor which is required to be protected by a fire-protective covering, the</p>	Subject to further review at CC stage	CRA – Refer Annexure 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]	<p>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—</p> <p>(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</p> <p>(b) a self-closing –/60/30 fire door or hopper; or</p> <p>(c) an access panel having an FRL of not less than –/60/30; or</p> <p>(d) if the shaft is a garbage shaft — a door or hopper of non-combustible construction.</p>	Subject to further review at CC stage	CRA – Refer Annexure F
C4D15: Openings for service installations [2019: C3.15]	<p>(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.</p> <p>(2) An installation mentioned in (1) must comply with any one of the following:</p> <p>(a) Tested systems — the following applies:</p> <p>(i) The service, building element and any protection method at the penetration—</p>	Subject to further review at CC stage	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(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</p> <p>(B) differ from a prototype assembly of the service, building element and protection method in accordance with Section 4 of AS 4072.1.</p> <p>(ii) It complies with (i) except for the insulation criteria relating to the service if—</p> <p>(A) the service is a pipe system comprised entirely of metal (excluding pipe seals or the like); and</p> <p>(B) any combustible building element is not located within 100 mm of the service for a distance of 2 m from the penetration; and</p> <p>(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</p> <p>(D) it is not located in a required exit.</p> <p>(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.</p>		

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	(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.		
C4D16: Construction joints [2019: C3.16]	<p>(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—</p> <p>(a) identical with a prototype tested in accordance with AS 4072.1 and AS 1530.4 to achieve the required FRL; or</p> <p>(b) that differs from a prototype in accordance with Section 4 of AS 4072.1 and achieves the required FRL.</p> <p>(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.</p> <p>(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..</p>	Subject to further review at CC stage	CRA – Refer Annexure F
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.	Subject to further review at CC stage – if required	CRA – Refer Annexure F



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Clause	Clause Requirements	Comment	Status
<b>Specification 5 – Fire-Resisting Construction</b>			
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]	<p>(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—</p> <p>(a) has an FRL of not less than 30/—/—; and</p> <p>(b) is neither transparent nor translucent.</p> <p>(2) A part of a building element is not exposed to a fire-source feature if the fire-source feature is—</p> <p>(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</p> <p>(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.</p> <p>(3) If various distances apply for different parts of a building element—</p> <p>(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</p>	Noted	Noted

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(b) each part of the element must have the FRL applicable according to its individual distance from the relevant fire-source feature.</p> <p>(4) The requirements of (3) do not override or permit any exemption from S5C3.</p>		
<p>S5C3: Fire protection for a support of another part</p> <p>[2019: Spec C1.1: 2.2]</p>	<p>(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—</p> <p>(a) have an FRL not less than that required by other provisions of this Specification; and</p> <p>(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—</p> <p>(i) for the supporting part itself; and</p> <p>(ii) for the part it supports; and</p> <p>(c) be non-combustible—</p> <p>(i) if required by other provisions of this Specification; or</p> <p>(ii) if the part it supports is required to be non-combustible.</p> <p>(2) The following building elements need not comply with (1)(b) and (1)(c)(ii):</p>	<p>Subject to further review at CC stage</p>	<p>CRA – Refer Annexure F</p>

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(a) An element providing lateral support to an external wall complying with S5C24(1)(b) or C2D12.</p> <p>(b) An element providing support within a carpark and complying with S5C19, S5C22 or S5C25.</p> <p>(c) A roof providing lateral support in a building—</p> <p style="padding-left: 40px;">(i) of Type A construction if it complies with S5C15(a), (b) or (d); and</p> <p style="padding-left: 40px;">(ii) of Type B and C construction.</p> <p>(d) A column providing lateral support to a wall where the column complies with S5C6(1) and (2).</p> <p>(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.</p>		
<p>S5C4: Lintels</p> <p>[2019: Spec C1.1: 2.3]</p>	<p>(1) A lintel must have the FRL required for the part of the building in which it is situated.</p> <p>(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—</p> <p style="padding-left: 40px;">(a) it spans an opening in—</p> <p style="padding-left: 80px;">(i) a wall of a building containing only one storey; or</p>	Subject to further review at CC stage	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(ii) a non-loadbearing wall of a Class 2 or 3 building; or</p> <p>(b) it spans an opening in masonry which is not more than 150 mm thick and—</p> <p>(i) not more than 3 m wide if the masonry is non-loadbearing; or</p> <p>(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</p>		
<p>S5C5: Attachments not to impair fire-resistance</p> <p>[2019: Spec C1.1: 2.4]</p>	<p>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.</p>	<p>Subject to further review at CC stage</p>	<p>CRA – Refer Annexure F</p>
<p>S5C6: General concessions</p> <p>[2019: Spec C1.1:2.5]</p>	<p>(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—</p> <p>(a) lift motor equipment; or</p> <p>(b) one or more of the following:</p> <p>(i) Hot water or other water tanks.</p> <p>(ii) Ventilating ductwork, ventilating fans and their motors.</p> <p>(iii) Air-conditioning chillers.</p> <p>(iv) Window cleaning equipment.</p>	<p>Subject to further review at CC stage</p>	<p>CRA – Refer Annexure F</p>

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(v) Other service units that are non-combustible and do not contain flammable or combustible liquids or gases.</p> <p>(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—</p> <p>(a) it does not form part of the only path of travel to a required exit from the building; and</p> <p>(b) in Type A construction—</p> <p>(i) it is situated not more than 2 storeys above the lowest storey providing direct egress to a road or open space; and</p> <p>(ii) any supporting columns are of non-combustible construction.</p>		
<p>S5C7: Mezzanine floors: Concession</p> <p>[2019: Spec C1.1: 2.6]</p>		This clause is not applicable to the subject building	NA
<p>S5C8: Enclosure of shafts</p> <p>[2019: Spec C1.1: 2.7]</p>	<p>(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.</p> <p>(2) The provisions of (1) need not apply to—</p>	<p>Subject to further review at CC stage</p> <p>Stair 8 – upgrade to have a fire-isolated stair to serve Level 2 plant room and Level 1 stores area. Roof of fire-isolated exit to comply with FRL -/120/120 – this can be a fire rated ceiling with two-way FRL -/120/120 with lightweight roof over.</p>	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(a) the top of a shaft extending beyond the roof covering, other than one enclosing a fire-isolated stairway or ramp; or</p> <p>(b) the bottom of a shaft if it is non-combustible and laid directly on the ground.</p>		
<p>S5C9: Carparks in Class 2 and 3 Buildings</p> <p>[2019: Spec C1.1: 2.8]</p>		This clause is not applicable to the subject building	NA
<p>S5C10: Residential Aged Care building: Concession</p> <p>[2019: Spec C1.1:2.9]</p>		This clause is not applicable to the subject building	NA
<p>Type B fire-resisting construction</p> <p>[2019: Spec C1.1: 4.0]</p>	Type B fire-resisting construction is applicable to the development.	Refer to clauses below for the relevant Type B Construction requirements applicable to the project.	-
<p>S5C21: Type B Fire-resisting Construction - Fire-resistance of building elements</p> <p>[2019: Spec C1.1: 4.1]</p>	<p>(1) In a building required to be of Type B construction—</p> <p>(a) each building element listed in Tables S5C21a, S5C21b, S5C21c, S5C21d, S5C21e, S5C21f and S5C21g, and any beam or column incorporated in it, must have an FRL not less than that listed in the Tables for the particular class of building concerned; and</p>	<p>Club Building: Subject to further assessment at CC stage – with some comments below:</p> <p>New works shall comply with Type B Construction.</p> <p>External wall loadbearing elements – when 18m or more from the fire-source feature no FRL. New works to Station Street and Bong Bong Road appear to be more than 18m to the fire-source feature on opposite side of the road. New Bin</p>	<p><b>PS</b></p> <p><b>Refer Part 3.3 of Report</b></p>

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(b) if a stair shaft supports any floor or a structural part of it—</p> <p>(i) the floor or part must have an FRL of 60/—/— or more; or</p> <p>(ii) the junction of the stair shaft must be constructed so that the floor or part will be free to sag or fall in a fire without causing structural damage to the shaft; and</p> <p>(c) any internal wall which is required to have an FRL with respect to integrity and insulation, except a wall that bounds a sole-occupancy unit in the topmost (or only) storey and there is only one unit in that storey, must extend to—</p> <p>(i) the underside of the floor next above if that floor has an FRL of at least 30/30/30; or</p> <p>(ii) the underside of a ceiling having a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or</p> <p>(iii) the underside of the roof covering if it is non-combustible and, except for roof 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</p> <p>(iv) 450 mm above the roof covering if it is combustible; and</p>	<p>Store &amp; Loading Dock are more than 18m to car park building.</p> <p>Internal columns in the storey immediately below the roof – new western extension – get exemption for nil FRL.</p> <p>Level 1 is an existing fire compartment with concrete construction (columns, floor &amp; 120 min FRLs) and fire rated walls to separate the Level 1 area from the remainder of the building.</p> <p>Stair 8 – upgrade to have a fire-isolated stair to serve Level 2 plant room and Level 1 stores area and have compliant FRLs.</p> <p><i>Performance Solution: With the proposed car park building, parts of the existing club building are now within 18m to the car park building. Rationalise the existing loadbearing columns in the club building within 18m to the car park building to have nil FRL.</i></p>	

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(d) a loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft) must be constructed from—</p> <ul style="list-style-type: none"> <li>(i) concrete; or</li> <li>(ii) masonry; or</li> <li>(iii) subject to (2), fire-protected timber; or</li> <li>(iv) any combination of (i) to (iii); and</li> </ul> <p>(e) in a Class 5, 6, 7, 8 or 9 building, in the storey immediately below the roof, internal columns and internal walls other than fire walls and shaft walls, need not comply with Tables S5C21e, S5C21f and S5C21g; and</p> <p>(f) in a Class 2 or 3 building, except where within the one sole-occupancy units, or a Class 9a health-care building or a Class 9b building, a floor separating storeys or above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, must—</p> <ul style="list-style-type: none"> <li>(i) be constructed so that it is at least of the standard achieved by 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</li> <li>(ii) have an FRL of at least 30/30/30; or</li> <li>(iii) have a fire-protective covering on the underside of the floor, including beams</li> </ul>		



Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>incorporated in it, if the floor is combustible or of metal; and</p> <p>(2) For the purposes of (1)(d)(iii), fire-protected timber may be used, provided that—</p> <p>(a) the building is—</p> <p>(i) a separate building; or</p> <p>(ii) a part of a building—</p> <p>(A) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or</p> <p>(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</p> <p>(b) the building has an effective height of not more than 25 m; and</p> <p>(c) the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with Specification 17; and</p> <p>(d) any insulation installed in the cavity of the timber building element required to have an FRL is non-combustible; and</p> <p>(e) cavity barriers are provided in accordance with Specification 9.</p>		

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Clause	Clause Requirements	Comment	Status
	(3) For the purposes of Table S5C21a and Table S5C21b, external wall includes any column and other building element incorporated within it or other external building element.		
S5C22: Type B Fire-resisting Construction - Carparks [2019: Spec C1.1: 4.2]		This clause is not applicable to the subject building	NA
S5C23: Type B Fire-resisting Construction - Class 2 and 3 buildings: Concession [2019: Spec C1.1: 4.3]		This clause is not applicable to the subject building	NA
Type C fire-resisting construction [2019: Spec C1.1: 5.0]	Type C fire-resisting construction is applicable to the development.	Refer to part 3 clauses below for the relevant Type C Construction requirements applicable to the project.	CRA – Refer Annexure F
S5C24: Type C Fire-resisting Construction - Fire-resistance of building elements [2019: Spec C1.1:5.1]	<p>(1) In a building required to be of Type C construction—</p> <p>(a) a building element listed in Tables S5C24a, S5C24b, S5C24c, S5C24d and S5C24e 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</p> <p>(b) an external wall that is required by Table S5C24a to have an FRL need only be tested from the outside to satisfy the requirement; and</p>	<p>Applies to Car Park Building.</p> <p>Car park can comply with S5C25 below – NCC 2025 Draft maintains the concession for car parks of Type C Construction</p>	Noted

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Clause	Clause Requirements	Comment	Status
	<p>(c) a fire wall or an internal wall bounding a sole-occupancy unit or separating adjoining units must comply with Specification 6 if it is of lightweight construction and is required to have an FRL; and</p> <p>(2) For the purposes of Table S5C24a and Table S5C24b, external wall includes any column and other building element incorporated within it or other external building element.</p>		
<p>S5C25: Type C Fire-resisting Construction - Carparks</p> <p>[2019: Spec C1.1: 5.2]</p>	<p>(1) Notwithstanding S5C24, 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—</p> <p>(a) a separate building; or</p> <p>(b) a part of a building, and if occupying only part of a storey, is separated from the remaining part by a fire wall.</p> <p>(2) For the purposes of this clause, a carpark—</p> <p>(a) includes—</p> <p>(i) an administration area associated with the functioning of the carpark; and</p> <p>(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</p>	<p>Car park can comply with S5C25 – NCC 2025 Draft maintains the concession for car parks of Type C Construction.</p> <p>The car park satisfies the concession and reduced FRLs can be applied as per this clause. GF storey has sprinkler system and Level 1 is an open-deck car park as it has no roof.</p>	<p>CRA – Refer Annexure F</p>

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Clause	Clause Requirements	Comment	Status
	<p>(b) excludes—</p> <p>(i) except for (a), any area of another classification, or other part of a Class 7 building not used for carparking; and</p> <p>(ii) a building or part of a building specifically intended for the parking of trucks, buses, vans and the like.</p> <p>(3) For building elements in a carpark as described in (1) and (2), the following minimum FRLs are applicable:</p> <p>(a) External walls:</p> <p>(i) Less than 1.5 m from a fire-source feature to which it is exposed:</p> <p>(A) Loadbearing: 60/60/60.</p> <p>(B) Non-loadbearing: –/60/60.</p> <p>(ii) 1.5 m or more from a fire-source feature to which it is exposed: –/–/–.</p> <p>(b) Internal walls: –/–/–.</p> <p>(c) Fire walls:</p> <p>(i) From the direction used as a carpark: 60/60/60.</p> <p>(ii) From the direction not used as a carpark: 90/90/90.</p> <p>(d) Columns:</p>		

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Clause	Clause Requirements	Comment	Status
	<p>(i) Steel column less than 1.5 m from a fire-source feature—</p> <p>(A) 60/—/—; or</p> <p>(B) ESA/M not greater than 26 m<sup>2</sup>/tonne.</p> <p>(ii) Any other column not less than 1.5 m from a fire-source feature: 60/—/—.</p> <p>(iii) Any other column not covered by (i) or (ii): —/—/—.</p> <p>(e) Beams:</p> <p>(i) Steel floor beam, less than 1.5 m from a fire-source feature, in continuous contact with a concrete floor slab—</p> <p>(A) 60/—/—; or</p> <p>(B) an ESA/M of not greater than 30 m<sup>2</sup>/tonne.</p> <p>(ii) any other beam: 60/—/—.</p> <p>(iii) more than 1.5 m from a fire-source feature: —/—/—.</p> <p>(f) Roof, floor slab and vehicle ramp: —/—/—.</p>		
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

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
<b>Specification 7 – Fire Hazard Properties</b>			
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]	<p>A floor lining or floor covering must have—</p> <p>(a) a critical radiant flux not less than that listed in Table S7C3; and</p> <p>(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</p> <p>(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.</p>	Subject to further review at CC stage	CRA – Refer Annexure F
S7C4: Wall and ceiling linings [2019: Spec C1.10: 4]	<p>(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—</p> <p>(a) a smoke growth rate index not more than 100; or</p>	Subject to further review at CC stage	CRA – Refer Annexure F

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(b) an average specific extinction area less than 250 m<sup>2</sup>/kg.</p> <p>(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.</p>		
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.	Subject to further review at CC stage	CRA – Refer Annexure F
S7C6: Lift cars [2019: Spec C1.10: 6]	<p>Materials used as—</p> <p>(a) floor linings and floor coverings must have a <i>critical radiant flux</i> not less than 2.2; and</p> <p>(b) wall and ceiling linings must be a Group 1 material or a Group 2 material in accordance with AS 5637.1:2015.</p>	Subject to further review at CC stage	CRA – Refer Annexure 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.	Subject to further review at CC stage	CRA – Refer Annexure 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

Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
<b>Specification 11 – Smoke Proof Walls in Health Care and Residential Care Buildings</b>			
S11C1: Scope [2019: Spec C2.5: 1]		This clause is not applicable to the subject building	NA
<b>Specification 12 – Fire Doors, Smoke Doors, Fire Window and Shutters</b>			
S12C1: Scope [2019: Spec C3.4: 1]	This Specification sets out requirements for the construction of fire doors, smoke doors, fire windows and fire shutters.	Noted	Noted
S12C2: Fire doors [2019: Spec C3.4: 2]	Fire doorsets must comply with AS 1905.1:2015 and not fail by radiation through any glazed part during the period specified for integrity in the required <i>FRL</i> .	Subject to further review at CC stage	CRA – Refer Annexure F
S12C3: General Requirements for Smoke doors [2019: Spec C3.4: 3.1]		This clause is not applicable to the subject building	NA
S12C4 : Construction Deemed-to-Satisfy for smoke doors [2019: Spec C3.4: 3.2]		This clause is not applicable to the subject building	NA
S12C5: Fire shutters [2019: Spec C3.4: 4]	A required fire shutter must— (a) be a shutter that—	Subject to further review at CC stage	CRA – Refer Annexure F



Section C: Fire Resistance			
Clause	Clause Requirements	Comment	Status
	<p>(i) is identical with a tested prototype that has achieved the required FRL; and</p> <p>(ii) is installed in the same manner and in an opening that is not larger than the tested prototype; and</p> <p>(iii) did not have a rise in average temperature on the side remote from the furnace of more than 140 K during the first 30 minutes of the test; or</p> <p>(b) be a steel shutter complying with AS 1905.2 if a metallic fire shutter is not prohibited by C4D6.</p>		
S12C6: Fire windows [2019: Spec C3.4: 5]		This clause is not applicable to the subject building	NA
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
<b>Part D1 – Access and Egress</b>			
Part D1 contains the Objectives, Functional Statements, Performance Requirements and Verification methods applicable to that part.			Noted
<b>Part D2 – Provision for Escape</b>			
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 <i>sole-occupancy unit</i> in a Class 2 or 3 building or a Class 4 part of a building.		Noted
D2D3: Number of exits required [2019: D1.2]	<p>(1) All buildings — Every building must have at least one exit from each storey.</p> <p>(2) Class 2 to 8 buildings —</p> <p>(a) In addition to any horizontal exit, not less than 2 exits must be provided from the following:</p> <p>(i) Each storey if the building has an effective height of more than 25 m.</p> <p>(ii) A Class 2 or 3 building subject to C2D6.</p> <p>(b) The requirements of (a)(i) do not apply to a part of a storey that—</p>	<p>Refer Part 2.8 of Report for assessment of exits.</p> <p>Some important assessment information shown below:</p> <p>Club Building: Level 1 function room has existing Stair 01 &amp; Stair 02 and complies with two exits. Stores area has the proposed Stair 08 fire-isolated stair – one fire-isolated exit is permitted to store rooms as per NSW D2D3(4)(b).</p> <p>Club Building: Level 2 plant room has one fire-isolated stair as the required exit which is permitted under NSW D2D3(4)(a)(vi) as the storey has less than 50 persons.</p>	Complies

Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
	<p>(i) is provided with direct egress to a road or open space; and</p> <p>(ii) satisfies D2D5 by the provision of 1 exit.</p> <p>(3) Basements — In addition to any horizontal exit, not less than 2 exits must be provided from any storey if egress from that storey involves a vertical rise within the building of more than 1.5 m, unless—</p> <p>(a) the floor area of the storey is not more than 50 m<sup>2</sup>; and</p> <p>(b) the distance of travel from any point on the floor to a single exit is not more than 20 m.</p> <p>(4) Class 9 buildings —</p> <p>(a) In addition to any horizontal exit, not less than 2 exits must be provided from the following:</p> <p>(i) Each storey if the building has a rise in storeys of more than 6 or an effective height of more than 25 m.</p> <p>(ii) Any storey which includes a patient care area in a Class 9a health-care building.</p> <p>(iii) Any storey that contains sleeping areas in a Class 9c building.</p> <p>(iv) Any storey used as a Class 9b early childhood centre, or any Class 9b early childhood centre which forms part of a storey.</p>		

Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
	<p>(v) Each storey in a primary or secondary school with a rise in storeys of 2 or more.</p> <p>(vi) Any storey or mezzanine that accommodates more than 50 persons, calculated under D2D18.</p> <p>(b) The requirements of (a) do not apply to a part of a storey that—</p> <p>(i) is a plant room, machinery room, storeroom, lift-machine room or the like; and</p> <p>(ii) is provided with direct egress to a road, open space or a fire-isolated exit complying with D2D12(2); and</p> <p>(iii) satisfies D2D5 by the provision of 1 exit.</p> <p>(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—</p> <p>(a) an exit; or</p> <p>(b) at least 2 exits if 2 or more exits are required.</p>		
<p>D2D4: When fire-isolated stairways and ramps are required</p> <p>[2019: D1.3]</p>	<p>(2) Class 5, 6, 7, 8 or 9 buildings — Every stairway or ramp serving as a required exit must be fire-isolated unless—</p> <p>(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—</p>	<p>Basement new exit stairs are permitted to be non-fire isolated.</p> <p>Level 1 existing exit stairs are permitted to be non-fire isolated.</p> <p>Level 1 store rooms are provided with a new fire-isolated exit.</p>	Complies

Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
	<p>(i) the building has a sprinkler system (other than a FPAA101D system) complying with Specification 17 installed throughout; or</p> <p>(ii) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having—</p> <p>(A) an FRL of –/60/60, if non-loadbearing; and</p> <p>(B) an FRL of 90/90/90 for Type A construction or 60/60/60 for Type B or C construction, if loadbearing; and</p> <p>(C) no opening that could permit the passage of fire or smoke.</p>	<p>Level 2 existing plant room is served by an upgrade to provide fire-isolated stair – complies.</p> <p>Car park exit stairs are permitted to be non-fire isolated.</p>	
D2D5: Exit travel distances [2019: D1.4]	<p>(3) Class 5, 6, 7, 8 or 9 buildings — Subject to (4), (5) and (6)—</p> <p>(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</p> <p>(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.</p>	<p>Club Building: Basement level will be altered to provide compliant 20m to a point of choice and 40m to an exit.</p> <p>Club Building: Level 1 stores area has less than 20m to the fire stair Stair 8 - complies.</p> <p>Club Building Level 1: Complies</p> <p>Club Building: Level 2 plant room has less than 20m to the exit stair - complies.</p> <p>Club Building Ground Floor: central area of the club (Grid Q5) is up to 45m to an exit in lieu of 40m.</p> <p>Car Park: Ground Floor &amp; Level 1 – permit up to 45m to an exit</p>	<p><b>PS</b></p> <p><b>Refer Part 3.3 of Report</b></p>

Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
<p>D2D6: Distance between alternative exits</p> <p>[2019: D1.5]</p>	<p>Exits that are required as alternative means of egress must be—</p> <p>(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</p> <p>(b) not less than 9 m apart; and</p> <p>(c) not more than—</p> <p>(i) in a Class 2 or 3 building — 45 m apart; or</p> <p>(ii) in a Class 9a health-care building, if such required exit serves a patient care area — 45 m apart; or</p> <p>(iii) in all other cases — 60 m apart; and</p> <p>(d) located so that alternative paths of travel do not converge such that they become less than 6 m apart.</p>	<p>Club Building: Basement, Ground Floor and Level 1 comply.</p> <p>Car Park: Ground Floor &amp; Level 1 – permit up to 80-85m between exits</p>	<p><b>PS</b></p> <p><b>Refer Part 3.3 of Report</b></p>
<p>D2D7: Height of Exits, Paths of Travel to Exits and Doorways</p> <p>[2019: D1.6(a)]</p>	<p>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</p>	<p>Subject to further review at CC stage</p>	<p>CRA – Refer Annexure F</p>
<p>D2D8: Width of Exits and Paths of Travel to Exits</p> <p>[2019: D1.6(b), (c), (d) and (e)]</p>	<p>(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—</p>	<p>Basement – exit width complies.</p> <p>Ground Floor: The total aggregate exit width is 13.5m. As per D2D8(3)(a) this can cater for 1580 people. The maximum</p>	<p>CRA – Refer Annexure F</p>

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Clause	Clause Requirements	Comment	Status
	<p>(a) 1 m; or</p> <p>(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—</p> <p>(a) 1 m plus 250 mm for each 25 persons (or part) in excess of 100; or</p> <p>(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.</p> <p>(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—</p> <p>(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</p> <p>(b) in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200.</p>	<p>population will have to be based on this criterion. Refer D2D18 for further assessment.</p> <p>Level 1: Determine population can be further reviewed at CC stage with seating plans for dining areas and function rooms (D2D18(b) and based on aggregate exit width. Client has informed from site measurements that's Stair 1 has 2m exit width and Stair 2 has 1m width. Total 3m exit width = 320 population.</p> <p>Car Park complies.</p>	
<p>D2D9: Width of Doorways in Exits or Paths of Travel to Exits</p> <p>[2019: D1.6(f)]</p>	<p>In a required exit or path of travel to an exit, the unobstructed width of a doorway must be not less than—</p> <p>(c) the unobstructed width of each exit provided to comply with D2D8(1), (2), (3) or (4), minus 250 mm; or</p>	<p>Subject to further review at CC stage</p>	<p>CRA – Refer Annexure F</p>

Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
	(e) 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 where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i).	Compliance can be readily achieved	CRA – Refer Annexure F
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.	Subject to further review at CC stage	CRA – Refer Annexure 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	Level 1 Fire Stair 8: Permit the fire stair to serve the stores area whereby the stores area does not occupy the whole storey.  Level 1 Fire Stair 8: Permit the fire stair discharge at ground level to pass within 6m of openings in the external wall which	<b>PS</b>  <b>Refer Part 3.3 of Report</b>



Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
	<p>(c) a sanitary compartment, airlock or the like.</p> <p>(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—</p> <p>(a) to a road or open space; or</p> <p>(b) to a point—</p> <p>(i) in a storey or space, within the confines of the building, that is used only for pedestrian movement, car parking or the like and is open for at least <math>\frac{2}{3}</math> of its perimeter; and</p> <p>(ii) from which an unimpeded path of travel, not further than 20 m, is available to a road or open space; or</p> <p>(c) into a covered area that—</p> <p>(i) adjoins a road or open space; and</p> <p>(ii) is open for at least <math>\frac{1}{3}</math> of its perimeter; and</p> <p>(iii) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and</p> <p>(iv) provides an unimpeded path of travel from the point of discharge to the road or open space of not more than 6 m.</p>	<p>may not be protected in accordance with C4D5. In addition, the external wall may not provide the required FRL 60/60/60.</p> <p>Level 2 – the plant room occupies the whole storey and complies with direct exit into fire-isolated stair.</p>	

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Clause	Clause Requirements	Comment	Status
	<p>(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:</p> <p>(a) That part of the wall must have—</p> <p>(i) an FRL of not less than 60/60/60; and</p> <p>(ii) any openings protected internally in accordance with C4D5; and</p> <p>(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.</p> <p>(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—</p> <p>(a) a smoke lobby in accordance with D3D7 must be provided; or</p> <p>(b) the exit must be pressurised in accordance with AS 1668.1.</p> <p>(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.</p>		
D2D13: External stairways or ramps in lieu of fire-isolated exits		This clause is not applicable to the subject building	NA

Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
[2019: D1.8]			
<p>D2D14: Travel by non-fire-isolated stairways or ramps</p> <p>[2019: D1.9]</p>	<p>(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.</p> <p>(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.</p> <p>(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—</p> <p>(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</p> <p>(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.</p>	<p>Basement new exit stairs are permitted to be non-fire isolated and comply with this clause.</p> <p>Level 1 function room existing exit stairs are permitted to be non-fire isolated and comply with this clause.</p>	Complies
<p>D2D15: Discharge from exits</p> <p>[2019: D1.10]</p>	<p>(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.</p> <p>(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—</p>	<p>Discharge of exits can readily comply, subject to below:</p> <p>Permit the basement exit stairs to discharge adjacent each other in lieu of as far apart as practical.</p>	<p><b>PS</b></p> <p><b>Refer Part 3.3 of Report</b></p>

Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
	<p>(a) the minimum width of the required exit; or</p> <p>(b) 1 m,</p> <p>whichever is the greater.</p> <p>(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—</p> <p>(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</p> <p>(b) except if the exit is from a Class 9a building, a stairway complying with the Deemed-to-Satisfy Provisions of the NCC.</p> <p>(4) The discharge point of alternative exits must be located as far apart as practical.</p>		
D2D16: Horizontal exits [2019: D1.11]		This clause is not applicable to the subject building	NA
D2D17: Non-required stairways, ramps or escalators [2019: D1.12]	<p>An escalator, moving walkway or non-required non fire-isolated stairway or pedestrian ramp—</p> <p>(c) except where permitted in (b) must not connect more than—</p> <p>(i) 3 storeys if—</p>	Existing Stair 3 is permitted under this clause – it is not a required exit	Complies

Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
	<p>(A) each of those storeys is provided with a sprinkler system (other than a FPAA101D system) complying with Specification 17 throughout; and</p> <p>(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</p> <p>(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;</p>		
<p>D2D18: Number of persons accommodated</p> <p>[2019: D1.13]</p>	<p>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—</p> <p>(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—</p> <p>(i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and</p> <p>(ii) service ducts and the like, sanitary compartments or other ancillary uses; or</p> <p>(b) reference to the seating capacity in an assembly building or room; or</p>	<p>Basement: <math>670 / 30 = 23</math> people</p> <p>Ground Floor: The Table D2D18 is not specific with how to calculate the population for all areas of the building. Determine population can be further reviewed at CC stage with seating plans for dining areas and function rooms (D2D18(b)) and any other suitable means (D2D18(c)). It is noted the total aggregate exit width is 13.5m. As per D2D8(3)(a) this can cater for 1580 people. The maximum population will have to be based on this criterion of aggregate exit width. This can be regulated within the Fire Engineering Report.</p> <p>Level 1: Determine population can be further reviewed at CC stage with seating plans for dining areas and function rooms (D2D18(b) and based on aggregate exit width. Client has informed from site measurements that's Stair 1 has 2m exit width and Stair 2 has 1m width. Total 3m exit width = 320 population.</p>	Noted

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Clause	Clause Requirements	Comment	Status
	(c) any other suitable means of assessing its capacity.	Level 2 Plant room – 9 people  Car Park: Each Storey 5200 / 30 = 175 people	
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.	Travel distances have been measured in accordance with this clause	Noted
D2D20: Method of Measurement [2019: D1.15]	Informational	Noted	Noted
D2D21: Plant rooms, lift motor rooms and electricity network substations: concession [2019: D1.16]		This clause is not applicable to the subject building	NA

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Clause	Clause Requirements	Comment	Status
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;	Subject to further review at CC stage	CRA – Refer Annexure F
D2D23: Egress from primary schools [2019: D1.18]		This clause is not applicable to the subject building	NA
Part D3 – Construction of Exits			
D3D1: Deemed-to-Satisfy Provisions [2019: D2.0]	<p>(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 and D1P9 are satisfied by complying with—</p> <p>(a) D2D2 to D2D23, D3D2 to D3D30 and D4D2 to D4D13; and</p> <p>(b) in a building containing an atrium, Part G3; and</p> <p>(c) in a building in an alpine area, Part G4; and</p> <p>(d) for a building containing an occupiable outdoor area, Part G6; and</p> <p>(e) for additional requirements for Class 9b buildings, Part I1; and</p> <p>(f) for public transport buildings, Part I2; and</p> <p>(g) for farm buildings and farm sheds, Part I3.</p>	Noted	Noted

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Clause	Clause Requirements	Comment	Status
	<p>(2) Where a Performance Solution is proposed the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.</p> <p>(3) Performance RequirementD1P7 must be complied with if lifts are to be used to assist occupants to evacuate a building.</p>		
D3D2: Application of Part [2019: D2.1]	Informational	Part D3 applies to both buildings	Noted
D3D3: Fire-isolated stairways and ramps [2019: D2.2]	The fire isolated stairways must be constructed of <i>non-combustible</i> 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.	Subject to further review at CC stage	CRA – Refer Annexure F
D3D4: Non-fire-isolated stairways and ramps [2019: D2.3]	<p>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—</p> <p>(a) reinforced or prestressed concrete; or</p> <p>(b) steel in no part less than 6 mm thick; or</p> <p>(c) timber that—</p> <p>(i) has a finished thickness of not less than 44 mm; and</p>	<p>Club building only has a rise in storeys of two – therefore this clause is not applicable.</p> <p>Car park building has rise in storey of one.</p>	NA



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Clause	Clause Requirements	Comment	Status
	<p>(ii) has an average density of not less than 800 kg/m<sup>3</sup> at a moisture content of 12%; and</p> <p>(iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.</p>		
D3D5: Separation of rising and descending stair flights [2019: D2.4]		This clause is not applicable to the subject building	NA
D3D6: Open access ramps and balconies [2019: D2.5]		This clause is not applicable to the subject building	NA
D3D7: Smoke lobbies [2019: D2.6]		This clause is not applicable to the subject building	NA
D3D8: Installations in exits and paths of travel [2019: D2.7]	<p>(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.</p> <p>(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</p>	Subject to further review at CC stage	CRA – Refer Annexure F

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	<p>or any corridor, hallway, lobby or the like leading to a required exit.</p> <p>(3) Gas or other fuel services must not be installed in a required exit.</p> <p>(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—</p> <ul style="list-style-type: none"> <li>(a) electricity meters, distribution boards or ducts; or</li> <li>(b) central telecommunications distribution boards or equipment; or</li> <li>(c) electrical motors or other motors serving equipment in the building.</li> </ul> <p>(5) An enclosure for the purposes of (4) must be suitably sealed against smoke spreading from the enclosure and be—</p> <ul style="list-style-type: none"> <li>(a) non-combustible construction; or</li> <li>(b) a fire-protective covering.</li> </ul> <p>(6) Electrical wiring may be installed in a fire-isolated exit if the wiring is associated with—</p> <ul style="list-style-type: none"> <li>(a) a lighting, detection, or pressurisation system serving the exit; or</li> <li>(b) a security, surveillance or management system serving the exit; or</li> </ul>		

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	<p>(c) an intercommunication system or an audible or visual alarm system in accordance with D3D27; or</p> <p>(d) the monitoring of hydrant or sprinkler isolating valves.</p>		
<p>D3D9: Enclosure of space under stairs and ramps</p> <p>[2019: D2.8]</p>	<p>(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.</p> <p>(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—</p> <p>(a) the enclosing walls and ceilings have an FRL of not less than 60/60/60; and</p> <p>(b) any access doorway to the enclosed space is fitted with a self-closing –/60/30 fire door.</p>	<p>Stair 2 – the existing stair has a keg room below the stair which is an enclosed room which is not a fire rated room as required by D3D9. This will be addressed with a Performance Solution to address Performance Requirements C1P2 &amp; D1P4.</p>	<p><b>PS</b></p> <p><b>Refer Part 3.3 of Report</b></p>
<p>D3D10: Width of stairways and ramps</p> <p>[2019: D2.9]</p>	<p>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.</p>	<p>New works only have 2m wide stairs</p>	<p>Complies</p>
<p>D3D11: Pedestrian ramps</p> <p>[2019: D2.10]</p>	<p>(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.</p>	<p>Subject to further review at CC stage</p>	<p>CRA – Refer Annexure F</p>

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	<p>(2) A ramp serving as a required exit must—</p> <p>(a) where the ramp is also serving as an accessible ramp under Part D4, be in accordance with AS 1428.1; or</p> <p>(b) in any other case, have a gradient not steeper than 1:8.</p> <p>(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.</p>		
<p>D3D12: Fire-isolated passageways</p> <p>[2019: D2.11]</p>	<p>(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—</p> <p>(a) if the passageway discharges from a fire-isolated stairway or ramp — not less than that required for the stairway or ramp shaft; or</p> <p>(b) in any other case — not less than 60/60/60.</p> <p>(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—</p> <p>(a) a non-combustible roof covering; or</p> <p>(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.</p>	<p>Compliance to be achieved for Stair 8 and have same FRL as the fire stair</p>	<p>CRA – Refer Annexure F</p>

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D3D13: Roof as open space [2019: D2.12]		This clause is not applicable to the subject building	NA
D3D14: Goings and risers [2019: D2.13]	<p>(1) A stairway must have—</p> <p>(a) not more than 18 and not less than 2 risers in each flight; and</p> <p>(b) going (G), riser (R) and quantity (2R + G) in accordance with Table D3D14, except as permitted by (2) and (3); and</p> <p>(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—</p> <p>(i) adjacent risers, or between adjacent goings, is no greater than 5 mm; and</p> <p>(ii) the largest and smallest riser within a flight, or the largest and smallest going within a flight, does not exceed 10 mm; and</p> <p>(d) risers which do not have any openings that would allow a 125 mm sphere to pass through between the treads; and</p> <p>(e) treads which have—</p> <p>(i) a surface with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; or</p>	Subject to further review at CC stage	CRA – Refer Annexure F

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	<p>(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</p> <p>(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</p> <p>(g) in a Class 9b building, not more than 36 risers in consecutive flights without a change in direction of at least 30°; and</p> <p>(h) in the case of a required stairway, no winders in lieu of a landing;</p> <p>(3) Where a stairway discharges to a sloping public walkway or public road—</p> <p>(a) the riser (R) may be reduced to account for the slope of the walkway or road; and</p> <p>(b) the quantity (2R+G) may vary at that location.</p>								
D3D15: Landings [2019: D2.14]	<p>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.</p> <table><tr><td></td><th colspan="2">Surface Condition</th></tr><tr><th>Application</th><th>Dry</th><th>Wet</th></tr></table>		Surface Condition		Application	Dry	Wet	Subject to further review at CC stage	CRA – Refer Annexure F
	Surface Condition								
Application	Dry	Wet							

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	Ramp steeper than 1:14	P4 or R11	P5 or R12		
	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		

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D3D16: Thresholds [2019: D2.15]	<p>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—</p> <ul style="list-style-type: none"> <li>(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</li> <li>(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</li> <li>(c) in a building required to be accessible by Part D4, the doorway— <ul style="list-style-type: none"> <li>(i) opens to a road or open space; and</li> <li>(ii) is provided with a threshold ramp or step ramp in accordance with AS 1428.1; or</li> </ul> </li> <li>(e) in other cases— <ul style="list-style-type: none"> <li>(i) the doorway opens to a road or open space, external stair landing or external balcony; and</li> <li>(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.</li> </ul> </li> </ul>	Subject to further review at CC stage	CRA – Refer Annexure F
D3D17: Barriers to prevent falls [2019: D2.16(a) – (c)]	<p>(1) A continuous barrier must be provided along the side of—</p> <ul style="list-style-type: none"> <li>(a) a roof to which general access is provided; and</li> </ul>	Subject to further review at CC stage	CRA – Refer Annexure F



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	<p>(b) a stairway or ramp; and</p> <p>(c) a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and</p> <p>(d) any delineated path of access to a building,</p> <p>(e) if the trafficable surface is 1 m or more above the surface beneath.</p> <p>(2) The requirements of (1) do not apply to—</p> <p>(a) the perimeter of a stage, rigging loft, loading dock or the like; or</p> <p>(b) areas referred to in D3D23; or</p> <p>(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</p> <p>(d) a barrier provided to an openable window covered by D3D29.</p> <p>(3) A barrier required by (1) must be constructed in accordance with D3D18, D3D19, D3D20 and, if a wire barrier is used, D3D21.</p>		
<p>D3D18: Height of Barriers</p> <p>[2019: Table D2.16(a)]</p>	<p>(1) The height of a barrier required by D3D17 must be not less than the following:</p> <p>(a) For stairways or ramps with a gradient of 1:20 or steeper — 865 mm.</p>	Subject to further review at CC stage	CRA – Refer Annexure F

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	<p>(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.</p> <p>(c) In front of fixed seating on a mezzanine or balcony within an auditorium in a Class 9b building, where the horizontal projection extends not less than 1 m outwards from the top of the barrier — 700 mm.</p> <p>(d) For all other locations — 1 m.</p> <p>(2) For a barrier provided under (1) —</p> <p>(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</p> <p>(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.</p>		
D3D19: Openings in barriers [2019: Table D2.16(a)]	<p>(1) Except where allowed by (2), openings in a required barrier must not allow a 125 mm sphere to pass through.</p> <p>(2) In a fire-isolated stairway, fire-isolated ramp or other area used primarily for emergency purposes, openings in a required barrier—</p> <p>(a) must not allow a 300 mm sphere to pass through; or</p> <p>(b) where rails are used—</p>	Subject to further review at CC stage	CRA – Refer Annexure F

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	<p>(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</p> <p>(ii) the opening between rails must not be more than 460 mm.</p> <p>(3) In Class 7 (other than carpark) and Class 8 buildings, openings in a required barrier—</p> <p>(a) must not allow a 300 mm sphere to pass through; or</p> <p>(b) where rails are used—</p> <p>(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</p> <p>(ii) the opening between the rails must not be more than 460 mm.</p> <p>(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.</p> <p>(5) For a barrier provided under (1), the maximum 125 mm barrier opening for a stairway, such as a non fire-isolated stairway, is measured above the nosing line of the stair treads.</p> <p>(6) Where a required barrier is fixed to the vertical face forming an edge of a landing, balcony, deck, stairway or</p>		

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	<p>the like, the opening formed between the barrier and the face must not exceed 40 mm.</p> <p>(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.</p>		
<p>D3D20: Barrier climbability</p> <p>[2019: Table D2.16(a)]</p>	<p>(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.</p> <p>(2) The requirements of (1) do not apply to—</p> <p>(a) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, other than—</p> <p>(i) external stairways; and</p> <p>(ii) external ramps; and</p> <p>(b) Class 7 (other than car parks) and Class 8 buildings.</p>	Subject to further review at CC stage	CRA – Refer Annexure F
<p>D3D21: Wire barriers</p> <p>[2019: D2.16(d)]</p>		This clause is not applicable to the subject building	NA
<p>D3D22: Handrails</p> <p>[2019: D2.17]</p>	<p>(1) Except for handrails referred to in D3D23, and subject to (2), handrails must—</p> <p>(a) be located along at least one side of the ramp or flight; and</p>	Subject to further review at CC stage	CRA – Refer Annexure F

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	<p>(b) be located along each side if the total width of the stairway or ramp is 2 m or more; and</p> <p>(c) in a Class 9b building used as a primary school or a building that contains an early childhood centre—</p> <p>(i) have one handrail fixed at a height of not less than 865 mm; and</p> <p>(ii) in addition to (i), have a handrail—</p> <p>(A) fixed at a height between 665 mm and 750 mm in a primary school; and</p> <p>(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</p> <p>(d) in any other case, be fixed at a height of not less than 865 mm; and</p> <p>(e) be continuous between stair flight landings and have no obstruction on or above them that will tend to break a hand-hold; and</p> <p>(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).</p> <p>(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.</p>		

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	<p>(4) Handrails required to assist people with a disability must be provided in accordance with D4D4.</p> <p>(6) The requirements of (5) do not apply to—</p> <p>(a) handrails referred to in D3D23; or</p> <p>(b) a stairway or ramp providing a change in elevation of less than 1 m; or</p> <p>(c) a landing; or</p> <p>(d) a winder where a newel post is installed to provide a handhold.</p>		
<p>D3D23: Fixed platforms, walkways stairways and ladders</p> <p>[2019: D2.18]</p>	<p>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—</p> <p>(a) machinery rooms, boiler houses, lift-machine rooms, plant-rooms, and the like; or</p> <p>(b) non-habitable rooms, such as attics, storerooms and the like that are not used on a frequent or daily basis in the internal parts of a sole-occupancy unit in a Class 2 building or Class 4 part of a building.</p>	Subject to further review at CC stage	CRA – Refer Annexure F
<p>D3D24: Doorways and doors</p> <p>[2019: D2.19]</p>	<p>(1) A doorway in a resident use area of a Class 9c building must not be fitted with—</p> <p>(a) a sliding fire door; or</p>	Subject to further review at CC stage	CRA – Refer Annexure F

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	<p>(b) a sliding smoke door; or</p> <p>(c) a revolving door; or</p> <p>(d) a roller shutter door; or</p> <p>(e) a tilt-up door.</p> <p>(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—</p> <p>(a) must not be fitted with a revolving door; and</p> <p>(b) must not be fitted with a roller shutter or tilt-up door unless—</p> <p>(i) it serves a Class 6, 7 or 8 building or part with a floor area not more than 200 m<sup>2</sup>; and</p> <p>(ii) the doorway is the only required exit from the building or part; and</p> <p>(iii) it is held in the open position while the building or part is lawfully occupied; and</p> <p>(c) must not be fitted with a sliding door unless—</p> <p>(i) it leads directly to a road or open space; and</p> <p>(ii) the door is able to be opened manually under a force of not more than 110 N; and</p> <p>(d) if fitted with a door which is power-operated—</p>		

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	<p>(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</p> <p>(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.</p> <p>(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.</p>		
D3D25: Swinging doors [2019: D2.20]	<p>(1) A swinging door in a required exit or forming part of a required exit—</p> <p>(a) must not encroach—</p> <p>(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</p> <p>(ii) when fully open, by more than 100 mm on the required width of the required exit; and</p> <p>(b) must swing in the direction of egress unless—</p> <p>(i) it serves a building or part with a floor area not more than 200 m<sup>2</sup>, it is the only required exit from</p>	Compliance can be readily achieved at CC stage	CRA – Refer Annexure F



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	<p>the building or part and it is fitted with a device for holding it in the open position; or</p> <p>(ii) it serves a sanitary compartment or airlock (in which case it may swing in either direction);</p> <p>(c) must not otherwise impede the path or direction of egress.</p> <p>(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.</p>		
<p>D3D26: Operation of latch [2019: D2.21]</p>	<p>(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—</p> <p>(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—</p> <p>(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</p> <p>(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</p> <p>(b) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor.</p>	<p>Compliance can be readily achieved at CC stage</p>	<p>CRA – Refer Annexure F</p>

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	<p>(2) Where the latch operation device referred to in (1)(b) is not located on the door leaf itself—</p> <p>(a) manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located—</p> <p>(i) not less than 500 mm from an internal corner; and</p> <p>(ii) for a hinged door, between 1 m and 2 m from the door leaf in any position; and</p> <p>(iii) for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position; and</p> <p>(b) braille and tactile signage complying with S15C3 and S15C6 must identify the latch operation device.</p> <p>(3) The requirements of (1) and (2) do not apply to a door that—</p> <p>(a) serves a vault, strong-room, sanitary compartment, or the like; or</p> <p>(b) serves only, or is within—</p> <p>(i) a sole-occupancy unit in a Class 2 building or a Class 4 part of a building; or</p> <p>(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</p>		

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	<p>(iii) a sole-occupancy unit with a floor area not more than 200 m<sup>2</sup> in a Class 5, 6, 7 or 8 building; or</p> <p>(iv) a space which is otherwise inaccessible to persons at all times when the door is locked; or</p> <p>(c) complies with (4) and serves—</p> <p>(i) Australian Government Security Zones 4 or 5; or</p> <p>(ii) the secure parts of a bank, detention centre, mental health facility, early childhood centre or the like; or</p> <p>(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 installed throughout the building, and is readily openable when unlocked; or</p> <p>(e) is in a Class 9a or 9c building and—</p> <p>(i) is one leaf of a two-leaf door complying with D2D9(a) or D2D9(d) provided that it is not held closed by a locking mechanism and is readily openable; and</p> <p>(ii) the door is not required to be a fire door or smoke door.</p>		

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	<p>(4) A door referred to in (3)(c) must be able to be immediately unlocked—</p> <p>(a) by operating a fail-safe control switch, not contained within a protective enclosure, to actuate a device to unlock the door; or</p> <p>(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.</p> <p>(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—</p> <p>(a) without a key from the side that faces a person seeking egress; and</p> <p>(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</p> <p>(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</p>		

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	(d) where the door is a door in a path of travel providing re-entry to the building from a balcony, terrace or the like, it may be fitted with key-operated fastenings only, the tongues of which must be locked in the retracted position whenever the building is occupied by the public, so the door can yield to pressure.		
D3D27: Re-entry from fire-isolated exits [2019: D2.22]		This clause is not applicable to the subject building	NA
D3D28: Signs on doors [2019: D2.23]	<p>(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—</p> <p>(a) a required—</p> <p>(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</p> <p>(ii) smoke door; and</p> <p>(b) any door which is a—</p> <p>(i) fire door forming part of a horizontal exit; and</p> <p>(ii) smoke door that swings in both directions; and</p> <p>(iii) door leading from a fire isolated exit to a road or open space.</p>	Compliance can be readily achieved at CC stage	CRA – Refer Annexure F

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Clause	Clause Requirements	Comment	Status
	<p>(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 the doorway, or signs must be fixed to both sides of the door.</p> <p>(3) A sign required by (1)(b) must be fixed on each side of the door.</p> <p>(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:</p> <p>(a) For an automatic door held open by an automatic hold-open device—</p> <p><b>FIRE SAFETY DOOR — DO NOT OBSTRUCT</b></p> <p>(b) For a self-closing door—</p> <p><b>DO NOT OBSTRUCT</b></p> <p><b>DO NOT KEEP OPEN</b></p> <p><b>FIRE SAFETY DOOR</b></p> <p>(c) For a door discharging from a fire-isolated exit—</p> <p><b>FIRE SAFETY DOOR — DO NOT OBSTRUCT</b></p>		
D3D29: Protection of openable windows		This clause is not applicable to the subject building	NA

Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
[2019: D2.24]			
D3D30: Timber stairways: concession  [2019: D2.25]		This clause is not applicable to the subject building	NA

Section D: Access and Egress			
Clause	Clause Requirements	Comment	Status
<b>Part D4 – Access for People with A Disability</b>			
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
<b>Part E1 – Fire Fighting Equipment</b>			
E1D1: Deemed-to-Satisfy Provisions	Informational	Noted	Noted

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
[2019: E1.0]			
E1D2: Fire hydrants [2019: E1.3]	<p>(1) A fire hydrant system must be provided to serve a building—</p> <ul style="list-style-type: none"> <li>(a) having a total floor area greater than 500 m<sup>2</sup>; and</li> <li>(b) where a fire brigade station is— <ul style="list-style-type: none"> <li>(i) no more than 50 km from the building as measured along roads; and</li> <li>(ii) equipped with equipment capable of utilising a fire hydrant.</li> </ul> </li> </ul> <p>(2) The fire hydrant system must be installed in accordance with AS 2419.1.</p> <p>(3) Notwithstanding (2), a Class 8 electricity network substation need not comply with clause 4.2 of AS 2419.1 if—</p> <ul style="list-style-type: none"> <li>(a) it cannot be connected to a town main supply; and</li> <li>(b) one hour water storage is provided for fire-fighting.</li> </ul> <p>(4) Where internal fire hydrants are provided, they must serve only the storey on which they are located except that a sole-occupancy unit—</p>	<p>Club building will be upgraded to comply with AS 2419.1:2021</p> <p>Car park building will comply with AS 2419.1:2021</p>	CRA – Refer Annexure F



Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(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</p> <p>(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 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.</p>		
<p>E1D3: Fire hose reels</p> <p>[2019: E1.4]</p>	<p>(1) E1D3 does not apply to—</p> <p>(a) a Class 2, 3 or 5 building or Class 4 part of a building; or</p> <p>(b) a Class 8 electricity network substation; or</p> <p>(c) a Class 9c building; or</p> <p>(d) classrooms and associated corridors in a primary or secondary school.</p> <p>(2) A fire hose reel system must be provided—</p> <p>(a) to serve the whole building where one or more internal fire hydrants are installed; or</p> <p>(b) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500 m<sup>2</sup>.</p> <p>(3) The fire hose reel system must—</p>	Both buildings to comply with this clause and AS 2441:2005.	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(a) have fire hose reels installed in accordance with AS 2441; and</p> <p>(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.</p> <p>(4) Fire hose reels must be located internally, externally or in combination, to achieve the system coverage specified in AS 2441.</p> <p>(5) In achieving system coverage, one or a combination of the following criteria for individual internally located fire hose reels must be met in determining the layout of any fire hose reel system:</p> <p>(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.</p> <p>(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.</p> <p>(c) Where system coverage is not achieved by compliance with (a) and (b), additional fire hose reels</p>		

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>may be located in paths of travel to an exit to achieve the required coverage.</p> <p>(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—</p> <p>(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</p> <p>(b) doorways in walls referred to in C3D13 or C3D14 separating equipment or electrical supply systems; and</p> <p>(c) doorway openings to shafts referred to in C4D14.</p> <p>(7) Where the normal water supply cannot achieve the flow and pressures required by AS 2441, or is unreliable—</p> <p>(a) a pump; or</p> <p>(b) water storage facility; or</p> <p>(c) both a pump and water storage facility,</p> <p>must be installed to provide the minimum flow and pressures required by clause 6.1 of AS 2441.</p>		
E1D4: Sprinklers [2019: E1.5]	<p>A sprinkler system must—</p> <p>(a) be installed in a building or part of a building when required by E1D5 to E1D13 as applicable; and</p>	Car park building shall comply with Spec 17	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	(b) comply with Specification 17 and Specification 18 as applicable.		
E1D5: Where sprinklers are required: all classifications [2019: Table E1.5]		This clause is not applicable to the subject building	NA
E1D6: Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings. [2019: Table E1.5]		This clause is not applicable to the subject building	NA
E1D7: Where sprinklers are required: Class 3 building used as a residential care buildings. [2019: Table E1.5]		This clause is not applicable to the subject building	NA
E1D8: Where sprinklers are required: Class 6 building. [2019: Table E1.5]		This clause is not applicable to the subject building	NA
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.	Car park building – ground floor to comply. Level 1 is an open-deck car park and no sprinklers required.	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
E1D10: Where sprinklers are required: Class 9a health care building used as a residential care building, Class 9c buildings. [2019: Table E1.5]		This clause is not applicable to the subject building	NA
E1D11: Where sprinklers are required: Class 9b buildings. [2019: Table E1.5]	(1) In a Class 9b building, other than an early childhood centre, see Part I1.  (2) In a Class 9b early childhood centre and in a building containing a Class 9b early childhood centre, sprinklers are required throughout the whole building, including any part of another class.	Club Building – sprinklers not required under NSW Part I1	NA
E1D12: Where sprinklers are required: additional requirements. [2019:Table E1.5]		This clause is not applicable to the subject building	NA
E1D13: Where sprinklers are required: occupancies of excessive hazard. [2019: Table E1.5]		This clause is not applicable to the subject building	NA
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—	Subject to further review at CC stage	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(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</p> <p>(ii) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500 m<sup>2</sup>, 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</p> <p>(c) subject to (2), selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444.</p> <p>(2) Portable fire extinguishers provided in a Class 2 or 3 building or Class 4 part of a building must be—</p> <p>(a) an ABE type fire extinguisher; and</p> <p>(b) a minimum size of 2.5 kg; and</p> <p>(c) distributed outside a sole-occupancy unit—</p> <p>(i) to serve only the storey at which they are located; and</p> <p>(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.</p> <p>(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:</p>		

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(a) To cover Class AE or E fire risks associated with emergency services switchboards.</p> <p>(b) To cover Class F fire risks involving cooking oils and fats in kitchens.</p> <p>(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).</p> <p>(d) To cover Class A fire risks in normally occupied fire compartments less than 500 m2 not provided with fire hose reels (excluding open-deck car parks).</p> <p>(e) To cover Class A fire risks in classrooms and associated corridors in primary and secondary schools not provided with fire hose reels.</p> <p>(f) To cover Class A fire risks associated with a Class 2, 3 or 5 building or Class 4 part of a building.</p> <p>(5) For the purposes of (3) and (4):</p> <p>(a) Fire risks are defined in accordance with AS 2444.</p> <p>(b) An emergency services switchboard is one which sustains emergency equipment operating in the emergency mode.</p> <p>(c) Additional extinguishers may be required to cover fire risks in relation to special hazards provided for in E1D17.</p>		
E1D15: Fire control centres		This clause is not applicable to the subject building	NA

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
[2019: E1.7]			
<p>E1D16: Fire precautions during construction</p> <p>[2019: E1.9]</p>	<p>In a building under construction—</p> <p>(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</p> <p>(b) after the building has reached an effective height of 12 m—</p> <p>(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</p> <p>(ii) any required booster connections must be installed.</p>	Subject to further review at CC stage	Noted
<p>E1D17: Provision for special hazards</p> <p>[2019: E1.10]</p>	<p>Suitable additional provision must be made if special problems of fighting fire could arise because of—</p> <p>(a) the nature or quantity of materials stored, displayed or used in a building or on the allotment; or</p> <p>(b) the location of the building in relation to a water supply for fire-fighting purposes.</p>	Car park building – subject to further review if EV charging stations are to be provided	FI



Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
<b>Specification 17 – Fire Sprinkler Systems</b>			
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.	Car park to have AS 2118.1:2017 system	CRA – Refer Annexure F
S17C3: Separation of sprinklered and non-sprinklered areas [2019: Spec E1.5:3]	Where a part of a building is not protected with sprinklers, the sprinklered and non-sprinklered parts must be fire-separated with a wall or floor which must—  (a) comply with any specific requirement of the Deemed-to-Satisfy Provisions of the BCA; or  (b) where there is no specific requirement, comply with the relevant part of AS 2118, FPAA101D or FPAA101H.	Subject to further review at CC stage	CRA – Refer Annexure F
S17C4: Protection of openings [2019: Spec E1.5:4]	Any openings, including those for service penetrations, in construction separating sprinklered and non-sprinklered parts of a building, including the construction separating the areas nominated for omitted protection in AS 2118.1, must be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4.	Subject to further review at CC stage	CRA – Refer Annexure F
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	Subject to further review at CC stage	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	demonstrated that the sprinkler system is designed to accommodate their use.		
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.	Complies	Complies
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.	Subject to further review at CC stage	CRA – Refer Annexure F
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.	Sprinkler system will activate BOWS	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
S17C9: Connection to Other Systems [2019: Spec E1.5:9]		This clause is not applicable to the subject building	NA
S17C10: Anti-tamper Devices [2019: Spec E1.5:10]	<p>(1) Where a sprinkler system is installed—</p> <p>(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</p> <p>(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.</p> <p>(2) Any valves provided to control sprinklers required by (1) must be fitted with anti-tamper monitoring devices connected to a monitoring panel.</p>	Subject to further review at CC stage	CRA – Refer Annexure F
S17C11: Sprinkler Systems in Carparks [2019: Spec E1.5:11]		This clause is not applicable to the subject building	NA
S17C12: Residential Care Buildings [2019: Spec E1.5:12]		This clause is not applicable to the subject building	NA

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
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).	Subject to further review at CC stage	CRA – Refer Annexure F
S17C14: Early childhood centres		This clause is not applicable to the subject building	NA

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

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
[2019: E2.1]			
E2D3: General requirements [2019: E2.2]	<p>(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—</p> <p>(a) to operate as a smoke control system in accordance with AS 1668.1; or</p> <p>(b) such that it—</p> <p>(i) incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and</p> <p>(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.</p> <p>(2) For the purposes of (1), each sole-occupancy unit in a Class 2 or 3 building is treated as a separate fire compartment.</p> <p>(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.</p>	Mechanical systems to be reviewed at CC stage – compliance with E2D3(1) to be advised.	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
E2D4: Fire-isolated exits [2019: Table E2.2a]		This clause is not applicable to the subject building	NA
E2D5: Buildings more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building. [2019: Table E2.2a]		This clause is not applicable to the subject building	NA
E2D6: Buildings more than 25m in effective height: Class 5, 6, 7b, 8 or 9b buildings [2019:E2.2a]		This clause is not applicable to the subject building	NA
E2D7: Buildings more than 25m in effective height: Class 9a buildings [2019:E2.2a]		This clause is not applicable to the subject building	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]		This clause is not applicable to the subject building	NA

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
E2D9: Buildings not more than 25m in effective height: Class 5, 6, 7b, 8 and 9b buildings [2019:E2.2a]	<p>(1) A building not more than 25 m in effective height that—</p> <p>(a) is a Class 5 or 9b school building or part of a building having a rise in storeys of more than 3; or</p> <p>(b) is a Class 6, 7b, 8 or 9b building (other than a school) or part of a building having a rise in storeys of more than 2; or</p> <p>(c) has a rise in storeys of more than 2 and contains—</p> <p>(i) a Class 5 or 9b school part; and</p> <p>(ii) a Class 6, 7b, 8 or 9b (other than a school) part,</p> <p>must meet the requirements of (2).</p>	Club Building: The Class 9b building only has a rise in storeys of two, therefore E2D9(1)(b) is not applicable.	NA
E2D10: Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4 [2019:E2.2a]		This clause is not applicable to the subject building	NA
E2D11: Buildings not more than 25 m in effective height: Class 9a and 9c buildings [2019:E2.2a]		This clause is not applicable to the subject building	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.	Car park ground floor will not have a mechanical ventilation system proposed	N/A

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
<p>E2D13: Basements (other than Class 7a buildings)</p> <p>[2019:E2.2a]</p>	<p>(1) A basement, other than a Class 7a basement, not counted in the rise in storeys in accordance with C2D3, must—</p> <p>(a) comply with measures in accordance with this Part applicable to the building generally; and</p> <p>(b) where the basement has a total floor area of more than 2000 m2, be provided with—</p> <p>(i) if not more than 2 below ground storeys—</p> <p>(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</p> <p>(B) an automatic smoke detection and alarm system complying with Specification 20; or</p> <p>(C) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17; or</p> <p>(ii) if more than 2 below ground storeys, a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.</p> <p>(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.</p>	<p>Basement level is not counted in the rise in storeys, however it is less than 2000m2 and therefore this clause is not applicable.</p> <p>Noted the basement is part of Class 9b building and will comply with Part E2 as per the overall Class 9b building.</p>	Noted



Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
E2D14: Class 6 buildings – in fire compartments more than 2000 m <sup>2</sup> : Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit) [2019:E2.2b]		This clause is not applicable to the subject building	NA
E2D15: Class 6 buildings – in fire compartments more than 2000 m <sup>2</sup> : Class 6 building (containing an enclosed common walkway or mall) [2019:E2.2b]		This clause is not applicable to the subject building	NA
NSW E2D16: Class 9b – assembly buildings: all [2019:E2.2b]	<p>The following provisions apply to all Class 9b assembly buildings:</p> <p>(a) A building or part of a building used as an assembly building must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS 1668.1) which does not form part of the smoke hazard management system, on the activation of—</p> <p>(i) smoke detectors installed complying with S20C6; and</p>	<p>(a) Club building shall comply with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS 1668.1) which does not form part of the smoke hazard management system, on the activation of smoke detectors installed complying with S20C6.</p> <p>(b) The basement storey shall be provided with smoke detection and alarm system to S20C4 &amp; S20C7..</p> <p>(c) No stage in the club building.</p>	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(ii) any other installed fire detection and alarm system, including a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.</p> <p>(b) A basement not counted in the rise in storeys in accordance with C2D3, less than 2000 m2 used as an assembly building or part of an assembly building containing an auditorium or other public area, must be equipped with—</p> <p>(i) an automatic smoke detection system in accordance with Specification 20; or</p> <p>(ii) an automatic zone pressurisation system in accordance with AS 1668.1 if the basement has more than one fire compartment; or if the basement forms part of a multi fire compartmented building served by the zone pressurisation system; or</p> <p>(iii) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.</p>		
NSW E2D17: Class 9b – assembly buildings: night clubs [2019:E2.2b]		This clause is not applicable to the subject building	NA
NSW E2D18: Class 9b – assembly buildings: exhibition halls and museums		This clause is not applicable to the subject building	NA

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
[2019:E2.2b]			
<p>NSW E2D19: Class 9b – assembly buildings: other assembly buildings (not listed in NSW E2D16 to NSW E2D18)</p> <p>[2019:E2.2b]</p>	<p>(1) Unless otherwise described in (2), in a building or part of a building used as an assembly building (not being a night club, discotheque or the like; or an exhibition hall, museum or art gallery) where the floor area of a fire compartment is more than 2000 m<sup>2</sup>, the fire compartment must be provided with—</p> <p>(a) an automatic smoke exhaust system complying with Specification 21; or</p> <p>(b) roof mounted automatic smoke-and-heat vents complying with Specification 22, in a single storey building or the top storey of a multi storey building; or</p> <p>(c) if the floor area of the fire compartment is not more than 5000 m<sup>2</sup> and the building has a rise in storeys of not more than 2—</p> <p>(i) an automatic smoke detection and alarm system complying with Specification 20; or</p> <p>(ii) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.</p> <p>(2) The following buildings are exempt from the provisions of (1):</p> <p>(a) Sporting complexes, (including sports halls, gymnasiums, swimming pools, ice and roller rinks, and the like) other than indoor sports stadiums with total spectator seating for more than 1000 persons.</p>	<p>Club Building: Ground Floor fire compartment shall comply. Level 1 fire compartment is less than 2000m<sup>2</sup>.</p> <p>The whole building will address compliance with Part E2 of the BCA with a performance-based approach to address smoke hazard management in accordance with Performance Requirement E2P2.</p>	<p><b>PS</b></p> <p><b>Refer Part 3.3 of Report</b></p>

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	(b) Churches and other places used solely for religious worship. (c) School classrooms.		
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.	Subject to further review is EV charging stations are proposed in the car park building.	FI

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
<b>Specification 20 – Smoke Detection and Alarm System</b>			
S20C1: Scope [2019: Spec E2.2a:1]	This Specification describes the installation and operation of automatic smoke detection and alarm systems.	Noted	Noted

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
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:  (c) Class 5, 6, 7, 8, 9b and 9c buildings — a smoke detection system complying with S20C4	Noted	Noted
S20C3: Smoke alarm system [2019: Spec E2.2a:3]		This clause is not applicable to the subject building	NA
S20C4: Smoke detection system [2019: Spec E2.2a:4]	<p>(1) In all Class 2 to 9 buildings provided with a smoke detection system, the following applies:</p> <p>(a) A smoke detection system must—</p> <p>(i) subject to (2), (3) and (4), comply with AS 1670.1; and</p> <p>(ii) activate a building occupant warning system in accordance with S20C7.</p> <p>(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)—</p> <p>(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</p> <p>(ii) an alarm acknowledgement facility may be installed.</p>	Club Building: Subject to further review in conjunction with the proposed Performance Solution to address E2P2.	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
S20C5: Combined smoke alarm and smoke detection system [2019: Spec E2.2a:5]		This clause is not applicable to the subject building	NA
S20C6: Smoke detection for smoke control system [2019: Spec E2.2a:6]	<p>(2) Smoke detectors required to activate—</p> <p>(a) automatic shutdown of air-handling systems in accordance with E2D16, E2D17 or E2D19; or</p> <p>(b) a smoke exhaust system in accordance with Specification 21,</p> <p>must comply with the requirements of (3).</p> <p>(3) Smoke detectors referred to in (2) must—</p> <p>(a) be spaced—</p> <p>(i) not more than 20 m apart and not more than 10 m from any wall, bulkhead or smoke curtain; and</p> <p>(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</p> <p>(b) have a sensitivity—</p> <p>(i) in accordance with AS 1670.1 in areas other than a multi-storey walkway and mall in a Class 6 building; and</p> <p>(ii) not exceeding 0.5% smoke obscuration per metre with compensation for external airborne</p>	<p>Club Building: Subject to further review in conjunction with the proposed Performance Solution to address E2P2.</p> <p>Club Building will have detection for automatic shutdown of air-handling systems.</p>	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>contamination as necessary, in a multi-storey walkway and mall in a Class 6 building.</p> <p>(4) Smoke detectors provided to activate a smoke control system must—</p> <p>(a) either—</p> <p>(i) form part of a building fire or smoke detection system complying with AS 1670.1; or</p> <p>(ii) be a separate dedicated system incorporating control and indicating equipment complying with AS 1670.1; and</p> <p>(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.</p>		
<p>S20C7: Building occupant warning system</p> <p>[2019: Spec E2.2a:7]</p>	<p>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.</p>	<p>Club Building: Subject to further review in conjunction with the proposed Performance Solution to address E2P2.</p> <p>Car Park: Sprinkler system will activate BOWS.</p>	<p>CRA – Refer Annexure F</p>
<p>S20C8: System Monitoring</p> <p>[2019: Spec E2.2a:8]</p>	<p>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:</p> <p>(d) Smoke detection in accordance with S20C6 provided to activate—</p>	<p>Club Building: Subject to further review in conjunction with the proposed Performance Solution to address E2P2.</p>	<p>CRA – Refer Annexure F</p>

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	(i) a smoke exhaust system in accordance with Specification 21; or  (ii) smoke-and-heat vents in accordance with Specification 22.		

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
<b>Part E3 – Lift Installations</b>			
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



Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
E3D2: Lift installations [2019: E3.1]	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification 24	Subject to further review at CC stage	CRA – Refer Annexure F
E3D3: Stretcher facility in lifts [2019: E3.2]		This clause is not applicable to the subject building	NA
E3D4: Warning against use of lifts in fire [2019: E3.3]	<p>(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.</p> <p>(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.</p> <p>(3) Each warning sign required by (1) must comply with the details and dimensions of Figure E3D4 and consist of—</p> <p>(a) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or</p> <p>(b) letters incised or inlaid directly into the surface of the material forming the wall.</p>	Subject to further review at CC stage	CRA – Refer Annexure F
E3D5: Emergency lifts [2019: E3.4]		This clause is not applicable to the subject building	NA
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.	Access Consultant to certify	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
<p>E3D7: Passenger lifts and their limitations</p> <p>[2019: E3.6]</p>	<p>(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:</p> <p>(a) There are no limitations on the use of electric passenger lifts, electrohydraulic passenger lifts or inclined lifts.</p> <p>(b) Stairway platform lifts must not—</p> <p>(i) be used to serve a space in a building accommodating more than 100 persons calculated according to D2D18; or</p> <p>(ii) be used in a high traffic public use area such as a theatre, cinema, auditorium, transport interchange, shopping centre or the like; or</p> <p>(iii) be used where it is possible to install another type of passenger lift; or</p> <p>(iv) connect more than 2 storeys; or</p> <p>(v) where more than 1 stairway lift is installed, serve more than 2 consecutive storeys; or</p> <p>(vi) when in the folded position, encroach on the minimum width of a stairway required by D2D8 to D2D11.</p> <p>(c) A low-rise platform lift must not travel more than 1000 mm.</p> <p>(d) A low-rise, low-speed constant pressure lift must not—</p>	<p>Subject to further review at CC stage</p>	<p>CRA – Refer Annexure F</p>

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(i) for an enclosed type, travel more than 4 m; or</p> <p>(ii) for an unenclosed type, travel more than 2 m; or</p> <p>(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.</p> <p>(e) A small-sized, low-speed automatic lift must not travel more than 12 m.</p> <p>(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.</p>		
<p>E3D8: Accessible features required for passenger lifts</p> <p>[2019: TableE3.6a, Table E3.6b]</p>	<p>In an accessible building, every passenger lift must have the following features where applicable:</p> <p>(a) A handrail complying with the provisions for a mandatory handrail in AS 1735.12 for all lifts except—</p> <p>(i) a stairway platform lift; and</p> <p>(ii) a low-rise platform lift.</p> <p>(b) Lift floor dimensions of not less than 1400 mm wide x 1600 mm deep for all lifts which travel more than 12 m.</p> <p>(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.</p>	<p>Subject to further review at CC stage – Access Consultant</p>	<p>CRA – Refer Annexure F</p>

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(d) Lift floor dimensions of not less than 810 mm wide x 1200 mm deep for a stairway platform lift.</p> <p>(e) Minimum clear door opening complying with AS 1735.12 for all lifts except a stairway platform lift.</p> <p>(f) Passenger protection system complying with AS 1735.12 for all lifts with power-operated doors.</p> <p>(g) Lift landing doors at the upper landing for all lifts except a stairway platform lift.</p> <p>(h) Lift car and landing control buttons complying with AS 1735.12 for all lifts except—</p> <p style="padding-left: 40px;">(i) a stairway platform lift; and</p> <p style="padding-left: 40px;">(ii) a low-rise platform lift.</p> <p>(i) Lighting in accordance with AS 1735.12 for all enclosed lift cars.</p> <p>(j) For all lifts serving more than 2 levels—</p> <p style="padding-left: 40px;">(i) automatic audible information within the lift car to identify the level each time the car stops; and</p> <p style="padding-left: 40px;">(ii) audible and visual indication at each lift landing to indicate the arrival of the lift car; and</p> <p style="padding-left: 40px;">(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.</p>		

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	(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]		This clause is not applicable to the subject building	NA
E3D10: Residential care buildings [2019: E3.8]		This clause is not applicable to the subject building	NA
E3D11: Fire service recall control switch [2019: E3.9]		This clause is not applicable to the subject building	NA
E3D12: Lift car fire service drive control switch [2019: E3.10]		This clause is not applicable to the subject building	NA

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
<b>Specification 24 – Lift Installations</b>			
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]	<p>(1) A lift car exposed to solar radiation directly, or indirectly by re-radiation, must have-</p> <p>(a) mechanical ventilation at a rate of one air change per minute; or</p> <p>(b) mechanical cooling.</p> <p>(2) A 2 hour alternative power source for ventilation or mechanical cooling at (1) must be provided in the event of normal power loss.</p>	Lift to car park building shall comply or be addressed with a Performance Solution - Subject to further review at CC stage	CRA – Refer Annexure F
S24C3: Lift car emergency lighting [2019: Spec E3.1:3]	<p>A lift car must have an emergency lighting system designed—</p> <p>(a) to come on automatically upon failure of the normal lighting supply; and</p> <p>(b) to provide at least 20 lux of lighting for 2 hours on the alarm initiation button.</p>	Subject to further review at CC stage	CRA – Refer Annexure F
S24C4: Cooling of lift shaft [2019: Spec E3.1:4]	<p>While a lift in a lift shaft is in service, the cooling of the lift shaft must—</p> <p>(a) ensure that the dry bulb air temperature in the lift shaft does not exceed 40°C; and</p>	Subject to further review at CC stage	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	(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]		This clause is not applicable to the subject building	NA
S24C6: Emergency access doors in a single enclosed lift shaft [2019: Spec E3.1:6]		This clause is not applicable to the subject building	NA

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
<b>Part E4 – Visibility In An Emergency, Exit Signs And Warning Systems</b>			
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	Subject to further review at CC stage.  The whole building will upgrade exit signage and emergency lighting to comply with Part E4 of the BCA.	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(b) in every storey of a Class 5, 6, 7, 8 or 9 building where the storey has an area more than 300 m<sup>2</sup>—</p> <p>(i) in every passageway, corridor, hallway, or the like, that is part of the path of travel to an exit; and</p> <p>(ii) in any room having a floor area more than 100 m<sup>2</sup> that does not open to a corridor or space that has emergency lighting or to a road or open space; and</p> <p>(iii) in any room having a floor area more than 300 m<sup>2</sup>; and</p> <p>(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—</p> <p>(i) a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or</p> <p>(ii) an external stairway serving instead of a fire-isolated stairway under D2D13; or</p> <p>(iii) an external balcony leading to a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or</p> <p>(iv) a road or open space; and</p> <p>(d) in every required non-fire-isolated stairway; and</p>		



Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(e) in a sole-occupancy unit in a Class 5, 6 or 9 building if—</p> <p>(i) the floor area of the unit is more than 300 m<sup>2</sup>; and</p> <p>(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</p> <p>(f) in every room or space to which there is public access in every storey in a Class 6 or 9b building if—</p> <p>(i) the floor area in that storey is more than 300 m<sup>2</sup>; or</p> <p>(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</p> <p>(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</p> <p>(iv) the storey provides a path of travel from any other storey required by (i), (ii) or (iii) to have emergency lighting;</p>		
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.	Subject to further review at CC stage  The whole building will upgrade exit signage and emergency lighting to comply with Part E4 of the BCA	CRA – Refer Annexure F
E4D5: Exit signs [2019: E4.5]	<p>An exit sign must be clearly visible to persons approaching the exit, and must be installed on, above or adjacent to each—</p> <ul style="list-style-type: none"> <li>(a) door providing direct egress from a storey to— <ul style="list-style-type: none"> <li>(i) an enclosed stairway, passageway or ramp serving as a required exit; and</li> <li>(ii) an external stairway, passageway or ramp serving as a required exit; and</li> <li>(iii) an external access balcony leading to a required exit; and</li> </ul> </li> <li>(b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and</li> <li>(c) horizontal exit; and</li> <li>(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.</li> </ul>	<p>Subject to further review at CC stage</p> <p>The whole building will upgrade exit signage and emergency lighting to comply with Part E4 of the BCA</p>	CRA – Refer Annexure F
E4D6: Direction signs [2019: E4.6]	If an exit is not readily apparent to persons occupying or visiting the building, then exit signs must be installed—	<p>Subject to further review at CC stage</p> <p>The whole building will upgrade exit signage and emergency lighting to comply with Part E4 of the BCA</p>	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(a) in appropriate positions in corridors, hallways, lobbies, foyers, auditoria, and the like, indicating the direction to a required exit; and</p> <p>(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.</p>		
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]	<p>Every required exit sign must—</p> <p>(a) comply with—</p> <p>(i) AS/NZS 2293.1; or</p> <p>(ii) for a photoluminescent exit sign, Specification 25; and</p> <p>(b) be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.</p>	<p>Subject to further review at CC stage</p> <p>The whole building will upgrade exit signage and emergency lighting to comply with Part E4 of the BCA</p>	CRA – Refer Annexure F
E4D9: Emergency warning and intercom systems [2019: E4.9]	<p>An emergency warning and intercom system complying, where applicable, with AS 1670.4 must be installed—</p> <p>with the type and condition of patients; and</p> <p>(e) in a Class 9b building—</p>	The existing Club building has an EWIS system. To maintain compliance the whole Club building will be provided with EWIS to Clause E4D9 and AS 1670.4:2018	CRA – Refer Annexure F

Section E: Services and Equipment			
Clause	Clause Requirements	Comment	Status
	<p>(i) used as a school and having a rise in storeys of more than 3; or</p> <p>(ii) used as a theatre, public hall, or the like, having a floor area more than 1000 m2 or a rise in storeys of more than 2.</p>		

## SECTION F: HEALTH AND AMENITY

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
<b>Part F1 – Surface water management, rising damp and external waterproofing</b>			
F1D1: Deemed-to-Satisfy Provisions [2019: F1.0]	<p>(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F1P1 to F1P4 are satisfied by complying with F1D2 to F1D8.</p> <p>(2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable</p>	-	Noted
F1D2: Application of part [New for 2022]	<p>(1) F1D4 and F1D5 do not apply to a roof with a covering complying with F3D2(a) to (d).</p> <p>(2) F1D3 to F1D5 do not apply to a balcony, podium or similar horizontal surface part of a building—</p>	<p>Club Building: There may be external balcony area which have the exemption because they are located directly above ground.</p> <p>Subject to further review at CC stage</p>	Noted

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
	<p>(a) where the flooring is of timber decking or other perforated flooring; or</p> <p>(b) which is located directly above ground.</p>		
F1D3: Stormwater drainage [2019: F1.1]	Stormwater drainage must be designed and constructed in accordance with AS/NZS 3500.3.	Subject to further review at CC stage	CRA – Refer Annexure F
F1D4: Exposed joints [New for 2022]	<p>Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must—</p> <p>(a) be protected in accordance with Section 2.9 of AS 4654.2; and</p> <p>(b) not be located beneath or run through a planter box, water feature or similar part of the building.</p>	<p>Club Building: There may be external balcony area which have the exemption because they are located directly above ground.</p> <p>Subject to further review at CC stage</p> <p>Note: Level 1 car park is exempt from the requirements of this clause as it is solely used for car parking on Ground Floor and F1P2 does not apply to Class 7 building where there is no necessity for compliance nor does it apply to open deck carpark.</p>	CRA – Refer Annexure F
F1D5: External above ground membranes [2019: F1.4]	<p>A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane—</p> <p>(a) consisting of materials complying with AS 4654.1; and</p> <p>(b) designed and installed in accordance with AS 4654.2.</p>	<p>Club Building: There may be external balcony area which have the exemption because they are located directly above ground.</p> <p>Subject to further review at CC stage.</p> <p>Note: Level 1 car park is exempt from the requirements of this clause as it is solely used for car parking on Ground Floor and F1P2 does not apply to Class 7 building where there is no necessity for compliance nor does it apply to open deck carpark.</p>	CRA – Refer Annexure F

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
F1D6: Damp-proofing [2019: F1.9]	<p>(1) Except for a building covered by (3), moisture from the ground must be prevented from reaching—</p> <ul style="list-style-type: none"> <li>(a) the lowest floor timbers and the walls above the lowest floor joists; and</li> <li>(b) the walls above the damp-proof course; and</li> <li>(c) the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders.</li> </ul> <p>(2) Where a damp-proof course is provided, it must consist of—</p> <ul style="list-style-type: none"> <li>(a) a material that complies with AS/NZS 2904; or</li> <li>(b) impervious sheet material in accordance with AS 3660.1.</li> </ul> <p>(3) The following buildings need not comply with (1):</p> <ul style="list-style-type: none"> <li>(a) A Class 7 or 8 building where in the particular case there is no necessity for compliance.</li> <li>(b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes.</li> <li>(c) An open spectator stand or open-deck carpark.</li> </ul>	Subject to further review at CC stage	CRA – Refer Annexure F
F1D7: Damp-proofing of floors on the ground [2019: F1.10]	<p>(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.</p>	Subject to further review at CC stage	CRA – Refer Annexure F

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
	<p>(2) The requirements of (1) do not apply where—</p> <p>(a) weatherproofing is not required; or</p> <p>(b) the floor is the base of a stair, lift or similar shaft which is adequately drained by gravitation or mechanical means.</p>		
<p>F1D8: Subfloor Ventilation</p> <p>[F1.12 of BCA 2019]</p>	<p>(1) Subfloor spaces must—</p> <p>(a) be provided with openings in external walls and internal subfloor walls in accordance with Table F1D8 for the climatic zones given in Figure F1D8; and</p> <p>(b) have clearance between the ground surface and the underside of the lowest horizontal member in the subfloor in accordance with Table F1D8.</p> <p>(2) In addition to (1), a subfloor space must—</p> <p>(a) be cleared of all building debris and vegetation; and</p> <p>(b) have the ground beneath the suspended floor graded to prevent surface water ponding under the building; and</p> <p>(c) contain no dead air spaces; and</p> <p>(d) have openings evenly spaced as far as practicable; and</p> <p>(e) have openings placed not more than 600 mm in from corners.</p>	<p>Subject to further review at CC stage – Club building will need compliance</p>	<p>CRA – Refer Annexure F</p>

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
	<p>(3) In double leaf masonry walls, openings specified in (1) must be provided in both leaves of the masonry, with openings being aligned to allow an unobstructed flow of air.</p> <p>(4) Openings in internal subfloor walls specified in (1) must have an unobstructed area equivalent to that required for the adjacent external openings.</p> <p>(5) Where the ground or subfloor space is excessively damp or subject to frequent flooding, in addition to the requirements of (1) to (4)—</p> <p>(a) the subfloor ventilation required in (1) must be increased by 50%; or</p> <p>(b) the ground within the subfloor space must be sealed with an impervious membrane; or</p> <p>(c) subfloor framing must be—</p> <p>(i) where above ground, above-ground durability Class 1 or 2 timbers or H3 preservative treated timbers in accordance with AS 1684.2, AS 1684.3 or AS 1684.4; or</p> <p>(ii) where in ground, in-ground durability Class 1 or 2 timbers or H5 preservative treated timbers in accordance with AS 1684.2, AS 1684.3 or AS 1684.4; or</p> <p>(iii) steel in accordance with NASH Standard 'Residential and Low-Rise Steel Framing' Part 2.</p>		



Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
<b>Part F2 – Wet areas and overflow protection</b>			
F2D1: Deemed-to-satisfy Provisions [New for 2022]	<p>(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F2P1 and F2P2 are satisfied by complying with F2D2 to F2D4.</p> <p>(2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.</p>	Noted	Noted
F2D2: Wet area construction [2019: F1.7]	<p>(1) In a Class 2 and 3 building and a Class 4 part of a building, building elements in wet areas must—</p> <p>(a) be water resistant or waterproof in accordance with Specification 26; and</p> <p>(b) comply with AS 3740.</p> <p>(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—</p> <p>(a) be water resistant or waterproof in accordance with Specification 26; and</p> <p>(b) comply with AS 3740,</p> <p>as if they were in a Class 2 or 3 building or a Class 4 part of a building.</p>	New works to Club building shall comply.	CRA – Refer Annexure F
F2D3: Rooms containing urinals [2019: F1.7]	<p>(1) Where a slab or stall type urinal is installed—</p>	New works to Club building shall comply.	CRA – Refer Annexure F

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
	<p>(a) the floor surface of the room containing the urinal must be an impervious material; and</p> <p>(i) where no step is installed, must—</p> <p>(A) be graded to the urinal channel for a distance of 1.5 m from the urinal channel; and</p> <p>(B) have the remainder of the floor graded to a floor waste; and</p> <p>(ii) where a step is installed—</p> <p>(A) the step must have an impervious surface and be graded to the urinal channel; and</p> <p>(B) the floor behind the step must be graded to a floor waste; and</p> <p>(b) the junction between the floor surface and the urinal channel must be impervious.</p> <p>(2) Where a wall hung urinal is installed—</p> <p>(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</p> <p>(b) the floor must be surfaced with an impervious material and be graded to a floor waste.</p> <p>(3) In a room with timber or steel-framed walls and containing a urinal—</p>		

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
	(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  (b) the junction of the floor surface and the wall surface must be impervious.		
F2D4: Floor wastes [2019: F1.11]	(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.	New works to Club building shall comply.	CRA – Refer Annexure 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

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
F3D2: Roof coverings [2019: F1.5]	<p>A roof must be covered with—</p> <ul style="list-style-type: none"> <li>(a) roof tiles complying with AS 2049, fixed in accordance with AS 2050; or</li> <li>(b) metal sheet roofing complying with AS 1562.1; or</li> <li>(c) plastic sheet roofing designed and installed in accordance with AS 1562.3; or</li> <li>(d) terracotta, fibre-cement and timber slates and shingles designed and installed in accordance with AS 4597, except in cyclonic areas; or</li> <li>(e) an external waterproofing membrane complying with F1D5.</li> </ul>	New works to Club building shall comply.	CRA – Refer Annexure F
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.	New works to Club building shall comply.	CRA – Refer Annexure F
F3D4: Glazed Assemblies [2019: F1.13]	<p>(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:</p> <ul style="list-style-type: none"> <li>(a) Windows.</li> <li>(b) Sliding and swinging glazed doors with a frame, including French and bi-fold doors with a frame.</li> <li>(c) Adjustable louvres.</li> <li>(d) Shopfronts.</li> </ul>	New works to Club building shall comply.	CRA – Refer Annexure F

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
	<p>(e) Window walls with one piece framing.</p> <p>(2) The following buildings need not comply with (1):</p> <p>(a) A Class 7 or 8 building where in the particular case there is no necessity for compliance.</p> <p>(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.</p> <p>(c) An open spectator stand or open-deck carpark.</p> <p>(3) The following glazed assemblies need not comply with (1):</p> <p>(a) All glazed assemblies not in an external wall.</p> <p>(b) Revolving doors.</p> <p>(c) Fixed louvres.</p> <p>(d) Skylights, roof lights and windows in other than the vertical plane.</p> <p>(e) Sliding and swinging glazed doors without a frame.</p> <p>(f) Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047.</p> <p>(g) Second-hand windows, re-used windows and recycled windows.</p>		

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
	(h) Heritage windows.		
F3D5: Wall Cladding [New for 2022]	<p>(1) External wall cladding must comply with one or a combination of the following:</p> <p>(a) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700.</p> <p>(b) Autoclaved aerated concrete: AS 5146.3.</p> <p>(c) Metal wall cladding: AS 1562.1.</p> <p>(2) The following buildings need not comply with (1):</p> <p>(a) A Class 7 or 8 building where in the particular case there is no necessity for compliance.</p> <p>(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.</p> <p>(c) An open spectator stand or open deck carpark.</p>	Club Building: Performance Solution Report required to address weatherproofing of external walls to F3P1	PS
Part F4 – Sanitary and Other Facilities			
F4D1: Deemed-to-Satisfy Provisions	<p>(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F4P1 to F4P6 are satisfied by complying with—</p> <p>(a) F4D2 to F4D12; and</p>	Noted	Noted

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
[2019: F2.0]	(b) for public transport buildings, Part I2; and (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]		This clause is not applicable to the subject building	NA
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.	Noted	Noted
F4D4: Facilities in Class 3 to 9 buildings (including Table 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	Club Building: Ground Floor – Based on Table F4D4I there are satisfactory number of toilets to cater for population.	CRA – Refer Annexure F

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
[2019: F2.3]	<p>or 9 buildings in accordance with Tables F4D4a, F4D4b, F4D4c, F4D4d, F4D4e, F4D4f, F4D4g, F4D4h, F4D4i, F4D4j, F4D4k and F4D4l, as appropriate.</p> <p>(2) In Tables F4D4a, F4D4b, F4D4c, F4D4d, F4D4e, F4D4f, F4D4g, F4D4h, F4D4i, F4D4j, F4D4k and F4D4l—</p> <p>(a) 'Number' means the number of facilities required; and</p> <p>(b) '&gt;' means greater than; and</p> <p>(c) a hyphen means no data (refer to the row above for the highest value applicable); and</p> <p>(d) 'N/A' means not applicable; and</p> <p>(e) a reference to—</p> <p>(i) 'employees' includes owners and managers using the building; and</p> <p>(ii) 'add 1 per 100 or 150, 250, 500, etc.' includes any part thereof of that number.</p> <p>(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.</p> <p>(6) Adequate means of disposal of sanitary products must be provided in sanitary facilities for use by females.</p> <p>(11) Not less than one washbasin must be provided where closet pans or urinals are provided.</p>	Club Building: Level 1 – no change to the population or toilet provisions.	



Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
<p>F4D5: Accessible sanitary facilities (including Table F2.4)</p> <p>[2019: F2.4]</p>	<p>In a building required to be accessible—</p> <p>(a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with F4D6; and</p> <p>(b) accessible unisex showers must be provided in accordance with F4D7; and</p> <p>(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</p> <p>(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</p> <p>(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</p> <p>(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</p> <p>(g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left</p>	<p>Refer separate Access Report</p>	<p>Noted</p>

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
	<p>and right handed mirror image facilities must be provided as evenly as possible; and</p> <p>(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</p> <p>(i) an accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey or level that is not required by D4D4(f) to be provided with a passenger lift or ramp complying with AS 1428.1.</p>		
<p>F4D6: Accessible unisex sanitary compartments</p> <p>[2019: Table F2.4a]</p>	<p>(1) Where required by F4D5(a), the minimum number of accessible unisex sanitary compartments for each class of building is as follows:</p> <p>(d) For Class 5, 6, 7, 8 or 9 buildings, where F4D4 requires closet pans—</p> <p>(i) 1 on every storey containing sanitary compartments; and</p> <p>(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.</p> <p>(2) The requirements of (1)(d) do not apply within a ward area of a Class 9a health-care building.</p> <p>(3) The requirements of (1)(e) do not apply to—</p>	Refer separate Access Report	Noted

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
	<p>(a) a Class 10a appurtenant to another class of building; or</p> <p>(b) a sanitary compartment dedicated to a single caravan/camping site.</p>		
<p>F4D7: Accessible unisex showers</p> <p>[2019: Table F2.4(b)]</p>	<p>(1) Where required by F4D5(b), the minimum number of accessible unisex showers for each class of building is as follows:</p> <p>(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.</p> <p>(3) The requirements of (1)(e) do not apply to—</p> <p>(a) a Class 10a appurtenant to another class of building; and</p> <p>(b) a sanitary compartment dedicated to a single caravan/camping site.</p>	Refer separate Access Report	Noted
<p>F4D8: Construction of sanitary compartments</p> <p>[2019: F2.5]</p>	<p>(1) Other than in an early childhood centre, sanitary compartments must have doors and partitions that separate adjacent compartments and extend—</p> <p>(a) from floor level to the ceiling in the case of a unisex facility; or</p>	New works to Club building shall comply.	CRA – Refer Annexure F

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
	<p>(b) to a height of not less than 1.5 m above the floor if primary school children are the principal users; or</p> <p>(c) 1.8 m above the floor in all other cases.</p> <p>(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—</p> <p>(a) open outwards; or</p> <p>(b) slide; or</p> <p>(c) be readily removable from the outside of the sanitary compartment.</p>		
<p>F4D9: Interpretation: urinals and washbasins</p> <p>[2019: F2.6]</p>	<p>(1) A urinal may be—</p> <p>(a) an individual stall or wall-hung urinal; or</p> <p>(b) each 600 mm length of a continuous urinal trough; or</p> <p>(c) a closet pan used in place of a urinal.</p> <p>(2) A washbasin may be—</p> <p>(a) an individual basin; or</p> <p>(b) a part of a hand washing trough served by a single water tap.</p>	New works to Club building shall comply.	Noted

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
F4D10: Microbial (legionella) control [2019: F2.7]	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.	-	-
F4D11: Waste Management [2019: F2.8]		This clause is not applicable to the subject building	NA
F4D12: Accessible adult change facilities [2019: F2.9]		This clause is not applicable to the subject building	NA

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
<b>Part F5 – Room Heights</b>			
F5D1: Deemed-to-Satisfy Provisions [2019: F3.0]	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirement F5P1 is satisfied by complying with—  (a) F5D2; and  (b) for farm sheds, Part I3.	Noted	Noted

Section F: Health and Amenity			
	(2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.		
<p>F5D2: Height of rooms and other spaces</p> <p>[2019: F3.1]</p>	<p>(3) The height of rooms and other spaces in a Class 5, 6, 7 or 8 building must be not less than—</p> <p>(a) except as allowed in (b) and (8) — 2.4 m; and</p> <p>(b) for a corridor, passageway, or the like — 2.1 m.</p> <p>(5) The height of rooms and other spaces in a Class 9b building must be not be less than—</p> <p>(a) for a school classroom or other assembly building or part that accommodates not more than 100 persons — 2.4 m; and</p> <p>(b) for a theatre, public hall or other assembly building or part that accommodates more than 100 persons — 2.7 m; and</p> <p>(c) for a corridor—</p> <p>(i) that serves an assembly building or part that accommodates not more than 100 persons — 2.4 m; or</p> <p>(ii) that serves an assembly building or part that accommodates more than 100 persons — 2.7 m.</p> <p>(6) For the purposes of (5) the number of persons accommodated must be calculated according to D2D18.</p> <p>(8) The height of rooms and other spaces in any building must be not be less than—</p>	Compliance can be readily achieved in both buildings	CRA – Refer Annexure F

Section F: Health and Amenity			
	<p>(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</p> <p>(b) for a commercial kitchen — 2.4 m; and</p> <p>(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;</p>		
Part F6 – Light and Ventilation			
<p>F6D1: Deemed-to-Satisfy Provisions</p> <p>[2019: F4.0]</p>	<p>(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F6P1 to F6P5 are satisfied by complying with—</p> <p>(a) F6D2 to F6D12; and</p> <p>(b) for a building containing an occupiable outdoor area, Part G6; and</p> <p>(c) for farm buildings and farm sheds, Part I3.</p> <p>(2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.</p>	Noted	Noted
<p>F6D2: Provision of natural light</p> <p>[2019: F4.1]</p>		This clause is not applicable to the subject building	NA

Section F: Health and Amenity			
F6D3: Methods and extent of natural lighting [2019: F4.2]		This clause is not applicable to the subject building	NA
F6D4: Natural light borrowed from adjoining room [2019: F4.3]		This clause is not applicable to the subject building	NA
F6D5: Artificial Lighting [2019: F4.4]	<p>(1) Artificial lighting must be provided—</p> <p>(a) in required stairways, passageways, and ramps; and</p> <p>(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—</p> <p>(i) a Class 4 part of a building — to sanitary compartments, bathrooms, shower rooms, airlocks and laundries; and</p> <p>(ii) a Class 2 building — to sanitary compartments, bathrooms, shower rooms, airlocks, laundries, common stairways and other spaces used in common by the occupants of the building; and</p> <p>(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.</p>	<p>New works to Club building shall comply.</p> <p>Car park building shall comply.</p>	CRA – Refer Annexure F



Section F: Health and Amenity			
	<p>(2) The artificial lighting system must comply with AS/NZS 1680.0.</p> <p>(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:</p> <p>(a) A theatre, cinema or the like, when performances are in progress, with the exception of aisle lighting required by Part I1.</p> <p>(b) A museum, gallery or the like, where sensitive displays require low lighting levels.</p> <p>(c) A discotheque, nightclub or the like, where to create an ambience and character for the space, low lighting levels are used.</p>		
<p>F6D6: Ventilation of rooms</p> <p>[2019: F4.5]</p>	<p>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—</p> <p>(a) natural ventilation complying with F6D7; or</p> <p>(b) a mechanical ventilation or air-conditioning system complying with AS 1668.2.</p>	<p>New works to Club building shall comply.</p> <p>Car park plant rooms shall comply.</p>	<p>CRA – Refer Annexure F</p>
<p>F6D7: Natural ventilation</p> <p>[2019: F4.6]</p>	<p>(1) Natural ventilation provided in accordance with F6D6(a) must consist of openings, windows, doors or other devices which can be opened—</p> <p>(a) with a ventilating area not less than 5% of the floor area of the room required to be ventilated; and</p> <p>(b) open to—</p>	<p>Subject to further review at CC stage – where applicable</p>	<p>CRA – Refer Annexure F</p>

Section F: Health and Amenity			
	<p>(i) a suitably sized court, or space open to the sky; or</p> <p>(ii) an open verandah, carport, or the like; or</p> <p>(iii) an adjoining room in accordance with F6D8.</p> <p>(2) The requirements of (1)(a) do not apply to a Class 8 electricity network substation.</p>		
<p>F6D8: Ventilation borrowed from adjoining room</p> <p>[2019: F4.7]</p>		This clause is not applicable to the subject building	NA
<p>F6D9: Restriction on position of water closets and urinals</p> <p>[2019: F4.8]</p>	<p>A sanitary compartment must not open directly into—</p> <p>(a) a kitchen or pantry; or</p> <p>(b) a public dining room or restaurant; or</p> <p>(c) a dormitory in a Class 3 building; or</p> <p>(d) a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand); or</p> <p>(e) a workplace normally occupied by more than one person.</p>	Proposed toilets comply	Complies
<p>F6D10: Airlocks</p> <p>[2019: F4.9]</p>		This clause is not applicable to the subject building	NA
F6D11: Carparks	Every storey of a carpark, except an open-deck carpark, must have—		CRA – Refer Annexure F

Section F: Health and Amenity			
[2019: F4.11]	<p>(a) a system of mechanical ventilation complying with AS 1668.2; or</p> <p>(b) a system of natural ventilation complying with Section 4 of AS 1668.4.</p>		
<p>F6D12: Kitchen local exhaust ventilation</p> <p>[2019: F4.12]</p>	<p>A commercial kitchen must be provided with a kitchen exhaust hood complying with AS 1668.1 and AS 1668.2 where—</p> <p>(a) any cooking apparatus has—</p> <p>(i) a total maximum electrical power input exceeding 8 kW; or</p> <p>(ii) a total gas power input exceeding 29 MJ/hour; or</p> <p>(b) the total maximum power input to more than one apparatus exceeds, per m2 of floor area of the room or enclosure—</p> <p>(i) 0.5 kW electrical power; or</p> <p>(ii) 1.8 MJ/hour gas.</p>	Club building shall comply	CRA – Refer Annexure F

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
<b>Part F7 – Sound Transmission and Insulation</b>			
Part F7 is only applicable to Class 2, 3 and 9c buildings. as such, it is not applicable to the subject building.			

Section F: Health and Amenity			
Clause	Clause Requirements	Comment	Status
<b>Part F8 – Condensation Management</b>			
Part F8 is only applicable to Class 2 & 4 buildings. as such, it is not applicable to the subject building.			

## SECTION G: ANCILLARY PROVISIONS

Section G: Ancillary Provisions			
Clause	Clause Requirements	Comment	Status
<b>Part G1 – Minor Structures and Components</b>			
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 RequirementsG1P2 to G1P5 are satisfied by complying with G1D2 to G1D4.	Noted	Noted

Section G: Ancillary Provisions			
Clause	Clause Requirements	Comment	Status
	(3) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.		
G1D2: Swimming pools [2019: G1.1]		This clause is not applicable to the subject building	NA
G1D3: Refrigerated chambers, strong-rooms and vaults [2019: G1.2]	<p>(1) A refrigerated or cooling chamber, strongroom or vault that is of sufficient size for a person to enter must have—</p> <ul style="list-style-type: none"> <li>(a) a door which is capable of being opened by hand from inside without a key; and</li> <li>(b) internal lighting controlled only by a switch which is located adjacent to the entrance doorway inside the chamber, strongroom or vault; and</li> <li>(c) an indicator lamp positioned outside the chamber, strongroom or vault which is illuminated when the interior lights required by (b) are switched on; and</li> <li>(d) an alarm that is— <ul style="list-style-type: none"> <li>(i) located outside but controllable only from within the chamber, strongroom or vault; and</li> <li>(ii) able to achieve a sound pressure level outside the chamber, strongroom or vault of 90 dB(A) when measured 3 m from the sounding device.</li> </ul> </li> </ul> <p>(2) A door required by (1)(a) in a refrigerated or cooling chamber must have a doorway with a clear width of not less than 600 mm and a clear height not less than 1.5 m.</p>	Club building kitchen fit outs to comply	CRA – Refer Annexure F

Section G: Ancillary Provisions			
Clause	Clause Requirements	Comment	Status
G1D4: Outdoor play spaces [2019: G1.3]		This clause is not applicable to the subject building	NA
NSW G1D5: Provision for cleaning windows [2019: NSW G1.101]		This clause is not applicable to the subject building	NA

Section G: Ancillary Provisions			
Clause	Clause Requirements	Comment	Status
<b>Part G2 – Boilers, Pressure Vessels, Heating Appliances, Fireplaces, Chimneys and Flues</b>			
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
<b>Part G3 – Atrium Construction</b>			
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
<b>Part G4 – Construction in Alpine Areas</b>			
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
<b>Part G5 – Construction in Bushfire Prone Areas</b>			
The subject building is not located within a bushfire area nor is it a special fire protection purpose under NSW G5D2 - therefore the provisions of part G5 are not applicable.			

Section G: Ancillary Provisions			
Clause	Clause Requirements	Comment	Status
<b>Part G6 – Occupiable Outdoor Areas</b>			
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.	Level 1 of the car park is an occupiable outdoor area.  Not applicable to Club Building.	Noted

Section G: Ancillary Provisions			
Clause	Clause Requirements	Comment	Status
	<p>(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.</p> <p>(3) Except for G6D2, the Deemed-to-Satisfy Provisions of this Part do not apply to—</p> <p>(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</p> <p>(b) an occupiable outdoor area with an area less than 10m<sup>2</sup>.</p>		
<p>G6D2: Fire hazard properties</p> <p>[2019: G6.2]</p>	<p>(1) Subject to (2), a lining, material or assembly in an occupiable outdoor area must comply with C2D11 as for an internal element.</p> <p>(2) The following fire hazard properties of a lining, material or assembly in an occupiable outdoor area are not required to comply with C2D11:</p> <p>(a) Average specific extinction area.</p> <p>(b) Smoke-Developed Index.</p> <p>(c) Smoke development rate.</p> <p>(d) Smoke growth rate index (SMOGR<sub>RC</sub>).</p>	Subject to further review at CC stage	CRA – Refer Annexure F
<p>G6D3: Fire Separation</p> <p>[2019: G6.3]</p>	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 <i>fire wall</i> cannot be	Not applicable	NA



Section G: Ancillary Provisions			
Clause	Clause Requirements	Comment	Status
	used to separate an occupiable outdoor area into different <i>fire compartments</i> .		
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.	Travel distance will be addressed via a Performance Solution. Refer Part 3.3 of Report.	PS
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.	Car park non-fire isolated stairs can readily comply	CRA – Refer Annexure 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.	Subject to further review at CC stage	CRA – Refer Annexure 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.	Subject to further review at CC stage	CRA – Refer Annexure 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.	Subject to further review at CC stage	CRA – Refer Annexure 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.	Subject to further review at CC stage	CRA – Refer Annexure F

## SECTION I: SPECIAL USE BUILDINGS

Section I: Special Use Buildings			
Clause	Clause Requirements	Comment	Status
<b>Part I1 – Class 9b Buildings</b>			
I1D1: Application of part [2019: H1.0]	<p>(1) For a Class 9b building or part of a building that is not an entertainment venue—</p> <p>(a) the Deemed-to-Satisfy Provisions of Part I1 apply to every enclosed Class 9b building or part of a building which—</p> <p>(i) is a school assembly, church or community hall with a stage and any backstage area with a total floor area of more than 300 m<sup>2</sup>; or</p> <p>(ii) otherwise, has a stage and any backstage area with a total floor area of more than 200 m<sup>2</sup>; or</p> <p>(iii) has a stage with an associated rigging loft; and</p> <p>(b) notwithstanding (1)(a)—</p> <p>(i) I1D4 applies to every open or enclosed Class 9b building; and</p> <p>(ii) I1D7 applies to every enclosed Class 9b building.</p> <p>(2) For a Class 9b building that is an entertainment venue, NSW Part I4 applies in replacement of Part I1.</p>	<p>The club building is not any of these buildings – Part I1 is not applicable.</p> <p>Subject to I1D4 &amp; I1D7 being applicable</p>	Noted
I1D4: Seating Area [2019: H1.4]		Not applicable	NA

Section I: Special Use Buildings			
Clause	Clause Requirements	Comment	Status
I1D7: Aisle Lights [2019: H1.7]		Not applicable	NA

## SECTION J: ENERGY EFFICIENCY

Section J: Energy Efficiency (Class 3, 5, 6, 7b, 8, 9)
<p>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.</p> <p>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.</p>

## Annexure 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<sup>2</sup>) 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.

## Annexure 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 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, will comply with Specification C2D12.
5. 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.
6. The provision of fire walls within the building shall be in accordance with Clause C3D8 of the BCA.
7. Equipment will be separated in accordance with Clause C3D13 of the BCA.
8. The 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.
9. Doorways in any fire walls separating fire compartments will be protected in accordance with Clause C4D6 of the BCA.
10. 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.
11. Fire-isolated stairways will not be penetrated by services other than those permitted by Clause C4D10 of the BCA.
12. 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.
13. 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.
14. The lift doors will be -/60/- fire doors complying with AS 1735.11:1986 in accordance Clause C4D11 of the BCA.
15. 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.
16. 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.

17. 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.
18. 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.
19. Smoke-proof walls and doorways required in the health care or aged care building will be in accordance with Specification 11 of the BCA.
20. Fire doors will comply with AS 1905.1:2015 and Specification 12 of the BCA.
21. The number of exits provided to the building will be in accordance with Clause D2D3 of the BCA.
22. The required exits will be fire-isolated in accordance with Clause D2D4 of the BCA.
23. Travel distances to exits will be in accordance with Clause D2D5 of the BCA.
24. The alternative exits will be distributed uniformly around the storey and will not be less than 9m apart, and not more than 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.
25. 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.
26. The fire-isolated exits will be in accordance with Clause D2D12 of the BCA.
27. Discharge from exits will be in accordance with Clause D2D15 of the BCA.
28. The non-required stairways, ramps and escalators will be in accordance with Clause D2D17 of the BCA.
29. Access to the lift pit will be in accordance with Clause D2D22 of the BCA.
30. 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.
31. 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.
32. 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.
33. 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.
34. The fire-isolated passageway will be in accordance with Clause D3D12 of the BCA.
35. 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.
36. 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.

37. The handrails and balustrades to all stairs and throughout the building will be in accordance with D3D17 to D3D22 of the BCA.
38. 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.
39. The doorways and doors will be in accordance with Clause D3D24 and D3D25 of the BCA.
40. Door latching mechanisms will be in accordance with Clause D3D26 of the BCA
41. Signage will be provided on fire and smoke doors in accordance with Clause D3D28 of the BCA.
42. Fire precautions whilst the building is under construction will be in accordance with Clause E1D16 of the BCA.
43. 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.
44. External above ground waterproofing membranes will comply with Clause F1D5 of the BCA and AS 4654 Parts 1 & 2:2012.
45. The new roof covering will be in accordance with Clause F3D1 of the BCA.
46. Any sarking proposed will be installed in accordance with Clause F3D2 of the BCA.
47. Waterproofing of all wet areas to the building will be carried out in accordance with Clause F2D2 of the BCA and AS 3740:2010.
48. Damp proofing of the proposed structure will be carried out in accordance with Clause F1D6 and F1D7 of the BCA.
49. Floor wastes will be installed to bathrooms and laundries above sole-occupancy units or public space in accordance with Clause F2D4 of the BCA.
50. Sub-floor ventilation will be provided in accordance with Clause F1D8 of the BCA.
51. 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).
52. Sanitary facilities will be provided in the building in accordance with Clause F4D3 & F4D4 of the BCA.
53. Accessible sanitary facilities will be provided in the building in accordance with Clause F4D5 and F4D6 of the BCA and AS1428.1:2009.
54. The construction of the sanitary facilities will be in accordance with Clause F4D8 of the BCA.
55. Ceiling heights will be in accordance with Clause F5D2 of the BCA.
56. Natural ventilation, where proposed, will be provided in accordance with Clause F6D6 & F6D7 of the BCA.
57. Water closets and urinals will be located in accordance with Clause F6D9 of the BCA.
58. The sanitary compartments will either be provided with mechanical exhaust ventilation or an airlock in accordance with Clause F6D10 of the BCA.
59. The refrigerated or cooling chamber, strongroom or vault will be in accordance with Clause G1D3.

- 60. The occupiable outdoor area is to comply with the requirements of Part G6 of the BCA.
- 61. 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:**

- 62. A smoke detection and alarm system will be installed throughout the building in accordance with Part E2 of the BCA and the proposed Performance-based strategy for smoke hazard management.
- 63. Emergency lighting will be installed throughout the development in accordance with Clause E4D2 and E4D4 of the BCA and AS/NZS 2293.1:2018.
- 64. Exit signage will be installed in accordance with Clause E4D5, E4D7 and E4D8 of the BCA and AS/NZS 2293.1:2018.
- 65. Club Building: An emergency warning and intercom system (EWIS) will be provided to the building in accordance with Clause E4D9 of the BCA.
- 66. Artificial lighting will be installed throughout the development in accordance Clause F6D5 of the BCA and AS/NZS 1680.0:2009.
- 67. 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:**

- 68. Storm water drainage will be provided in accordance with Clause F1D3 of the BCA and AS/NZS 3500.3:2018
- 69. Fire hydrant system will be installed in accordance with Clause E1D2 of the BCA and AS 2419.1:2021 as required.
- 70. Fire hose reels will be installed in accordance with Clause E1D3 of the BCA and AS 2441:2005.
- 71. Car Park Building: A sprinkler system will be installed in accordance with Clauses E1D4 & E1D9 of the BCA and, Specification 17 and appropriate part(s) of AS 2118.
- 72. Portable fire extinguishers will be installed in accordance with Clause E1D14 of the BCA and AS 2444:2001.

**Mechanical Services Design Certification:**

- 73. Club Building: An air-handling system which does not form part of a smoke hazard management system will be installed in accordance with Clause NSW E2D16 of the BCA and AS 1668.1:2015.
- 74. Club Building: The whole building will address compliance with Part E2 of the BCA with a performance-based approach to address smoke hazard management in accordance with Performance Requirement E2P2.
- 75. Club Building: Where not naturally ventilated the building will be mechanically ventilated in accordance with Clause F6D6 of the BCA and AS 1668.2:2012.
- 76. Ground Floor 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.
- 77. 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.

78. Rigid and flexible ductwork will comply with the fire hazard properties set out in AS 4254 Parts 1 and 2.

**Structural Engineers Design Certification:**

79. 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.

80. Club Building: The FRL's of building elements for the proposed works have been designed in accordance with Tables S5C21a to S5C21f of the BCA for a building of Type B Construction.

81. Car Park: The FRL's of building elements for the proposed works have been designed in accordance with Tables S5C24a to S5C24e of the BCA for a building of Type C Construction, and S5C25 Car Parks.

82. The lift shaft will have an FRL in accordance with Clause C3D11 of the BCA.

83. Lightweight construction used to achieve required fire resistance levels will comply with Specification 6 of the BCA.

84. The construction joints to the structure will be in accordance with Clause C4D16 of the BCA to reinstate the FRL of the element concerned.

85. The concrete panel external walls will be in accordance with Clause C2D12 of the BCA.

86. 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:**

87. Warning signage in accordance with Clause E3D4 of the BCA will be provided to advise not to use the lifts in a fire.

88. 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.

89. 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.

90. The lifts will comply with AS 1735.12:1999 in accordance with Clause E3D8 of the BCA.

91. All electric passenger lifts and electrohydraulic passenger lifts shall comply with Specification 24 of the BCA.