BUILDING CONTROL GROUP

Address:	**1105 – 1107 BARRENJOEY ROAD, PALM BEACH NSW 2108**
Project:	**PROPOSED MIXED USE BUILDING**
Report:	**BCA ASSESSMENT REPORT**
Reference:	200316 - BCA Assessment Report
Date:	15 December 2020
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DOCUMENT CONTROL

Revision:	**Date:**	**Description:**	BCA Assessment Report	
200316 **DRAFT**	8 December 2020		**Prepared by:**	**Checked by:**
200316.1 **Final**	15 December 2020	**Name:**	Gary Pavlou	Lee Kippax
			Accredited Certifier Building Regulations Consultant	Accredited Certifier, No BPB0810 Director

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PART 1 BASIS OF ASSESSMENT

1.1 Location and Description

The development, the subject of this report, is proposed to be located at 1105 – 1107 Barrenjoey Road, Palm Beach and is for a proposed three storey shop-top housing development incorporating retail tenancies and serviced apartments, with a single storey basement carpark.

The development is accessible from Barrenjoey Road as shown below.

Courtesy of Sixmaps

1.2 Purpose

In accordance with our role as an Accredited Certifier we have undertaken an assessment of the proposed works having regards to Clause 145 of the Environmental Planning and Assessment Regulations 2000 and Clause 24 of the Building and Development Certifiers Regulation 2020. In this instance, the proposed works have been assessed against the Deemed to Satisfy provisions of the Building Code of Australia 2019 Vol. 1 Amdt 1 which has been adopted on 1st of July 2020.

Demonstrating compliance with the BCA is not a principal consideration under Section 4.15 of the Environmental Planning & Assessment Act 1979. It is noted however that Council has an obligation to consider whether the DA proposal, as lodged, is capable of complying with the BCA - without significant modification to those plans for which approval is sought.

This report will demonstrate that there will be no additional requirements, resulting from prescribed application of the BCA, for any significant design changes that would necessitate the submission of an application under Section 4.55 of the Environmental Planning and Assessment Act 1979.

1.3 Building Code of Australia

This report is based on the Deemed-to-Satisfy Provisions of the National Construction Code Series Volume 1 - Building Code of Australia, 2019 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 Edition of 2019$^{Amdt\ 1}$ is now in force since its adoption on 1st July 2020.**

1.4 Limitations

This report does not include nor imply any detailed assessment for design, compliance or upgrading for: -

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

This report does not include, or imply compliance wit

(a) the National Construction Code – Plumbing Code of Australia Volume 3

(b) the Disability Discrimination Act 1992 including the Disability (Access to Premises – Buildings) Standards 2010 – unless specifically referred to).

(c) Demolition Standards not referred to by the BCA;

(d) Work Health and Safety Act 2011;

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

(f) Previous conditions of Development Consent issued by the Local Consent Authority;

(g) Local Council Authority Development Control Plan.

1.5 Design Documentation

This report has been based on the design plans and Specifications listed in Annexure A of this Report.

PART 2 BUILDING DESCRIPTION

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

2.1 Rise in Storeys (Clause C1.2)

The building has a rise-in-storeys of three (3).

2.2 Classification (Clause A6.0)

The building has been classified as follows.

Class	Level	Description
7a	Lower Ground 02 - Lower Ground 01	*Carpark*
6	Ground Level	*Retail*
2	Lower Ground 02 – Level 2	*Residential Building*

2.3 Effective Height (Clause A1.0)

The building has an effective height of less than 25 metres, being **7.70m** taken from RL **3.20** at Ground Level up to **RL 10.90** at Level 2.

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

2.4 Type of Construction Required (Table C1.1)

Type A Construction.

2.5 Floor Area and Volume Limitations (Table C2.2)

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

- Class 2 - The Class 2 portions of the building are not subject to floor area and volume limitations of C2.2 as Table 3 of Specification C1.1 and Clause C3.11 of the BCA regulates the compartmentation and separation provisions applicable to buildings, or building portions, of Class 2 classifications.
- Class 6 - The Class 6 portion of the commercial tenancies does not exceed the area and volume limitations of C2.2
- Class 7a - The Class 7a portion of the carpark does not exceed the area and volume limitations of C2.2

2.6 Fire Compartments

The following fire compartments have been assumed:

1. Carpark level.
2. Retail Ground Level
3. Residential Ground Level
4. Each level of the residential storeys.

2.7 Exits

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

a) The fire stairs serving the residential parts at each storey,
b) The fire stairs serving the basement levels,
c) Exit doors at Ground Floor Level,

2.8 Climate Zone (Clause A1.0)

The building is located within Climate Zone 5.

PART 3 ESSENTIAL FIRE SAFETY MEASURES

The following **draft** fire safety measures are required to be installed in the building, this table may be required to be updated as the design develops and options for compliance are confirmed.

Item	Proposed Essential Fire Safety Measure	Minimum Standard of Performance
1.	Access panels, doors and hoppers to fire resisting shafts	BCA 2019$^{Amdt\ 1}$ Clause C3.13
2.	Automatic fire detection and alarm system	BCA 2019$^{Amdt\ 1}$ Clause E2.2a, Clause , 4, 6, 7 & 8 of Specification E2.2a, AS3786-2014 amdt 1 & 2 and AS1670.1-2018
3.	Building Occupant Warning System	BCA 2019$^{Amdt\ 1}$ Clause E2.2a, Clause 3, 4 & 7 of Specification E2.2a and AS1670.1-2018
4.	Emergency lighting	BCA 2019$^{Amdt\ 1}$ Clauses E4.2 & E4.4, AS2293.1-2018
5.	Exit signs	BCA 2019$^{Amdt\ 1}$ Clauses E4.5, E4.6 & E4.8, AS2293.1-2018
6.	Fire dampers	BCA 2019$^{Amdt\ 1}$Specification C3.15, AS/NZS1668.1-2015, AS1682.1 & 2
7.	Fire doors	BCA 2019$^{Amdt\ 1}$ Spec C3.4, AS1905.1-2015
8.	Fire hose reel system	BCA 2019$^{Amdt\ 1}$ Clause E1.4, AS2441-2005
9.	Fire hydrant system	BCA 2019$^{Amdt\ 1}$ Clause E1.3, AS2419.1-2005
10.	Fire seals protecting openings in fire resisting components of the building	BCA 2019$^{Amdt\ 1}$ Clause C3.15, AS1530.4-2014
11.	Lightweight Fire Rated Construction	BCA 2019$^{Amdt\ 1}$ Clause / Specification C1.8
12.	Mechanical air handling systems	BCA 2019$^{Amdt\ 1}$ Clause F4.5, F4.11, AS/NZS1668.2-2012
13.	Paths of travel, stairways, passageways or ramps	BCA 2019$^{Amdt\ 1}$ Section D
14.	Portable fire extinguishers	BCA 2019$^{Amdt\ 1}$ Clause E1.6, AS2444-2001
15.	Warning and operational signs	BCA 2019$^{Amdt\ 1}$ Clause D2.23, EP&A Reg. 2000 Clause 183
16.	*Any proposed Fire Engineering Report.*	*Where applicable, to address the outcomes of a proposed fire engineered alternative solution report pursuant of the Construction Certificate stage.*

PART 4 FIRE RESISTANCE LEVELS

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

Type A Construction

Item	Class 2	Class 6	Class 7a
Loadbearing External Walls: • less than 1.5m to a fire source feature • 1.5 – 3m from fire source feature; • more than 3m from a fire source feature.	90/90/90 90/60/60 90/60/30	180/180/180 180/180/120 180/120/90	120/120/120 120/90/90 120/60/30
Non-Loadbearing External Walls: • less than 1.5m to a fire source feature • 1.5 – 3m from fire source feature; • more than 3m from a fire source feature.	-/90/90 -/60/60 -/-/-	-/180/180 -/180/120 -/-/-	-/120/120 -/90/90 -/-/-
External Columns • Loadbearing • Non-loadbearing	90/-/- -/-/-	180/-/- -/-/-	120/-/- -/-/-
Fire Walls	90/90/90	180/180/180	120/120/120
Stair and Lift Shafts • Loadbearing • Non loadbearing	90/90/90 -/90/90	180/120/120 -/120/120	120/120/120 -/120/120
Internal walls bounding sole occupancy units • Loadbearing • Non loadbearing	90/90/90 -/60/60	180/-/- -/-/-	120/-/- -/-/-
Internal walls bounding public corridors, hallways and the like: • Loadbearing • Non loadbearing	90/90/90 -/60/60	180/-/- -/-/-	120/-/- -/-/-
Ventilating, pipe garbage and the like shafts: • Loadbearing • Non loadbearing	90/90/90 -/90/90	180/120/120 -/120/120	120/90/90 -/90/90
Other loadbearing internal walls, beams trusses and columns	90/-/-	180/-/-	120/-/-
Floors	90/90/90	180/180/180	120/120/120
Roofs	90/60/30	180/60/30	120/60/30

PART 5 MATTERS FOR FURTHER CONSIDERATION

5.1 General

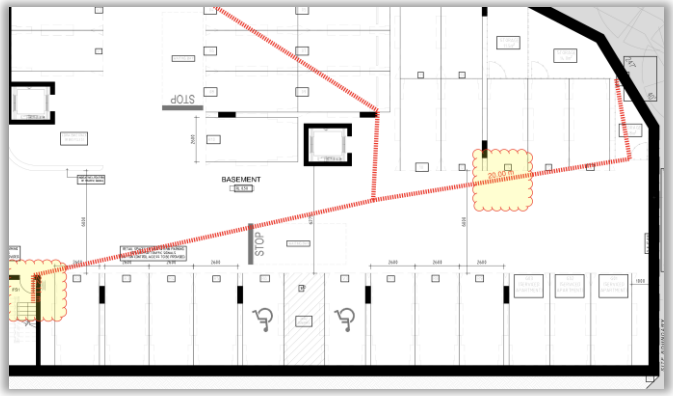
Assessment of the Architectural design documentation against the Deemed-to-Satisfy Provisions of the Building Code of Australia, 2019 has revealed the following areas where compliance with the BCA may require further consideration and/or may involve assessment as Performance Based (Fire Engineered) Alternative Solutions. Any Alternative Solutions would require special consideration that clearly indicates methodologies for achieving compliance with the relevant Performance Requirements.

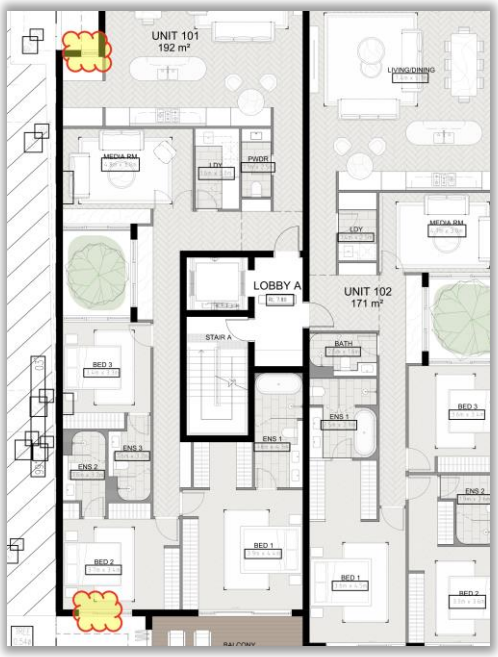
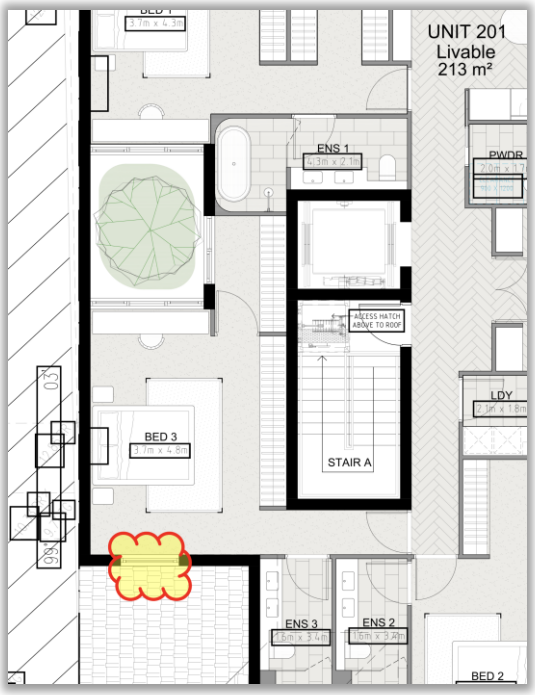
Annexure B to this report provides a detailed assessment of the proposal against all relevant Deemed-to-Satisfy Provisions of the BCA.

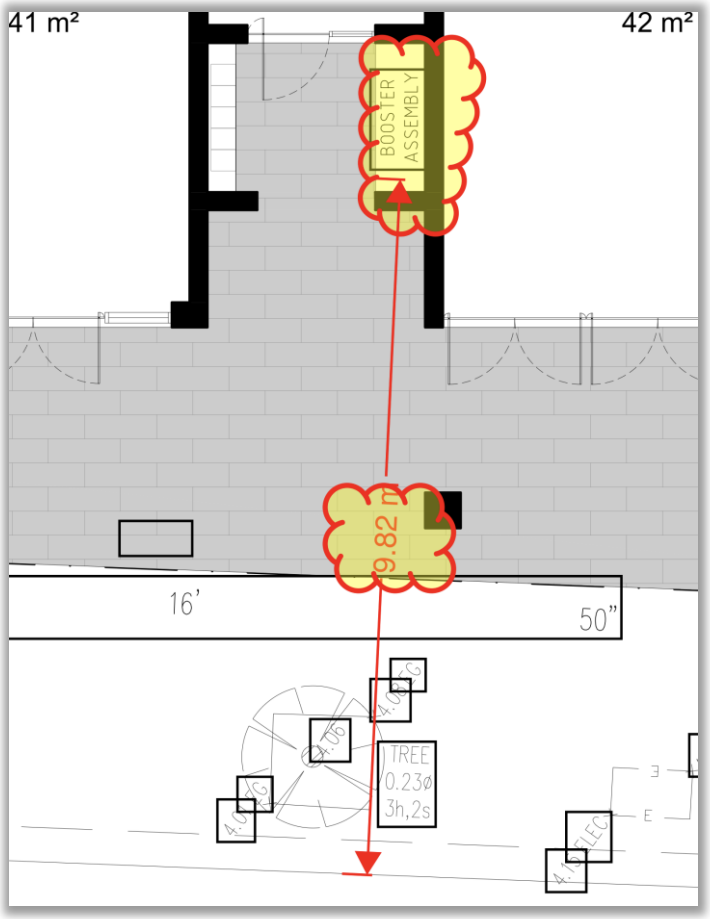
Note: It is important that Annexure B is read in conjunction with the items below, as some matters may not have had sufficient information provided to allow a detailed assessment to be undertaken.

5.2 Performance Based Design – Performance Solutions

There are specific areas throughout the development where Deemed-to-Satisfy BCA Compliance will not be achieved by the proposed design and site constraints. These matters may need to be addressed in a detailed Fire Safety Engineering Report or Access Solution Report to be prepared for this development separately:

Item	Description of Performance Solution	DTS Provision
1.	**Exit Travel Distances** 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 40m. Egress travel distance in the basement exceeds 40m **(42m)** to 'FS1' when measured to the nearest 'riser'.  ***Note:*** *For the purposes of this assessment 'FS1' is assumed to be designed as a non-fire isolated exit. In the event 'FS1' is designed as a fire isolated stair, further consideration is necessary to determine compliance with BCA Clause D1.7(b) & (c).* Should a deemed-to–satisfy solution not be proposed, a Fire-Engineered Alternative Solution is to be prepared by a C10 Accredited Fire Engineer at the Construction Certificate stage is order to justify the non-compliance and is to address the relevant Performance Requirements of the BCA accordingly.	**D1.4**

2.	**Protection of openings in external walls** Openings in the east and west elevations of the building are located within 3m of the southern boundary from Level 1 to Level 2 and may not comply with C3.2 & C3.4 of the BCA. A combination of deemed-to-satisfy and performance solution may be necessary to achieve compliance with the BCA. **Typical examples below:**   Should a deemed-to–satisfy solution not be proposed, a Fire-Engineered Alternative Solution is to be prepared by a C10 Accredited Fire Engineer at the Construction Certificate stage is order to justify the non-compliance and is to address the relevant Performance Requirements of the BCA accordingly.	**C3.2 & C3.4**

3.	**Fire Hydrant** The building is required to be provided with a fire hydrant system complying with AS2419.1-2005, The location of the **hydrant booster assembly** is acknowledged on the plans as being provided in the vicinity below;  To this end, please find below an extract from AS2419.1-2005 regarding the criteria for locating the hydrant booster assembly depending on whether its **affixed to**, or **remote from the building.** **7.3 LOCATION** Fire brigade booster assemblies shall be located so that they meet the following requirements: (a) They are readily accessible to firefighters. (b) They are operable by fire brigade pumping appliances located within 8 m. (c) If within, or affixed to, the external wall of the building, the booster shall be— (i) within sight of the main entrance to the building; and (ii) separated from the building by a construction with a fire resistance rating of not less than FRL 90/90/90 for a distance of not less than 2 m each side of and 3 m above the upper hose connections in the booster assembly NOTE: An example of a booster assembly within the external wall of a building is shown in Figure 7.3.1. (d) If remote from the building, the booster shall be— (i) at the boundary of the site and be within sight of the main entrance of the building; (ii) adjacent to the principal vehicular access to the site; and (iii) located not less than 10 m from the external wall of any building served NOTE: An example of a booster assembly remote from a building is shown in Figure 7.3.2.. (e) The booster enclosure shall only contain firefighting pipework and equipment.	**E1.3**

	In consideration of the above, it appears that the proposed booster assembly is affixed to the building and does not appear to comply with the following: • Operable by fire brigade pumping appliances ***located within 8m*** • Separated from the building by a construction with a fire resistance rating of not less than FRL 90/90/90 ***for a distance of not less than 2m each side of and 3m above the upper hose connections in the booster assembly.*** Where a deem-to-satisfy design is not proposed, a Fire-Engineered Performance Solution is to be prepared by a C10 Accredited Fire Engineer at the Construction Certificate stage in order to justify the non-compliance and is to address the relevant Performance Requirements of the BCA accordingly.	
4.	**Bounding Construction: Class 2, Buildings** It is acknowledged that a conflict exists between the fire-rating requirements for *'bounding construction'* for sole-occupancy units, lift shaft construction and the doorways for such lift shafts. It is interpreted by *Building Control Group* that the following lift doors, illustrated below, are required to achieve an ***FRL of '-/60/30'***.  Where a deem-to-satisfy design is not proposed, a Fire-Engineered Performance Solution is to be prepared by a C10 Accredited Fire Engineer at the Construction Certificate stage in order to justify the non-compliance and is to address the relevant Performance Requirements of the BCA accordingly.	**C3.11**
5.	**Sound Insulation Rating of Walls** It is acknowledged that a door may be incorporated in a wall that separates a class 2 sole-occupancy unit from a *stairway, public corridor, public lobby or the like*, provided the door assembly has a Rw of not less than 30. Similarly, a wall must meet certain sound insulation requirements in the BCA if it separates a sole-occupancy unit from a lift shaft. However, there are no provisions for lift shaft doorways opening directly into the sole occupancy unit.	**F5.5**

	 Where a deem-to-satisfy design is not proposed, a Performance Solution is to be prepared by a appropriately qualified acoustic engineer at the Construction Certificate stage in order to justify the non-compliance and is to address the relevant Performance Requirements of the BCA accordingly.	
6.	**Portable Fire Extinguisher** The building is to be provided with extinguishers in accordance with this clause and AS2444. Portable fire extinguishers must be— i. provided as listed in Table E1.6; and ii. for a Class 2 or 3 building or Class 4 part of a building, provided— (A) to serve the whole Class 2 or 3 building or Class 4 part of a building where one or more internal fire hydrants are installed; or (B) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500m², 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 iii. Subject to below, selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444. **Portable fire extinguishers provided in a Class 2 or 3 building or Class 4 part of a building must be—** **(i) an ABE type fire extinguisher; and** **(ii) a minimum size of 2.5 kg; and** **(iii) distributed outside a sole-occupancy unit—** **(A) to serve only the storey at which they are located; and** **(B) so that the travel distance from the entrance doorway of any sole-occupancy unit to the nearest fire extinguisher is <u>not more than 10m.</u>** **<u>Comment</u>** It is acknowledged that Unit 201,202 & 203 do not accommodate a common corridor and therefore compliance with the provision of this clause may not be able to be achieved given a fire extinguisher may not be able to be positioned <u>not more than 10m</u> from the entrance doorway of these sole-occupancy units.	**E1.6**

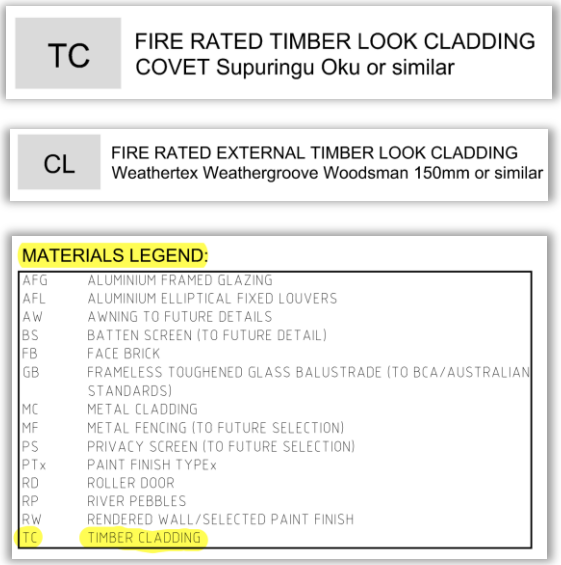
	Alternatively, where a deemed-to-satisfy design proposal is not achieved, a Fire-Engineered Performance Solution will need to be prepared by a C10 Accredited Fire Engineer at the Construction Certificate stage in order to justify the non-compliance and is to address the relevant Performance Requirements of the BCA accordingly.	

5.3 Non-combustible building elements (Clause C1.9)

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

a) **External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation.**
b) The flooring and floor framing of lift pits.
c) Non-loadbearing internal walls where they are required to be fire-resisting.

Your attention is drawn to the proposed cladding or the like, whereby the properties for <u>non-combustibility</u> are to be clarified and confirmed pursuant of the Construction Certificate stage.



5.4 BCA Compliance Statement

The following BCA matters are to be addressed at the **Construction Certificate Stage.**

Architectural Design Certification:

1. The FRL's of the structural elements for the proposed works have been designed in accordance with table 3 for a building of Type A Construction of Specification C1.1 of BCA 2019[Amdt 1].

2. Building elements and their components must be non-combustible for Type A construction as nominated in Clause C1.9 of BCA 2019[Amdt 1].

3. Materials, floor and wall linings/coverings, surface finishes and air-handling ductwork used in the works must comply with the fire hazard properties in accordance with Clause C1.10, and Specification C1.10 of BCA 2019[Amdt 1].

4. Ancillary elements fixed, installed or attached to the internal parts or external face of an external wall must comply with Clause C1.14 and Specification C1.10 of BCA 2019.

5. The parts of different classifications situated one above another in adjoining storeys must be separated in accordance with Clause C2.9 and Specification C1.1 of BCA 2019[Amdt 1].

6. Any electricity substation or any main switch room sustaining emergency equipment required operating in emergency mode, must be separating from the remaining building with construction having a FRL of 120/120/120 and provided with self-closing -/120/30 fire doors in accordance with Clause C2.13 of BCA 2019[Amdt 1].

7. Openings in the external walls that are required to have an FRL must be in located in accordance with Clause C3.2 and C3.3 of BCA 2019 or protected in accordance with Clause C3.4 of BCA 2019[Amdt 1].

8. Services penetrating elements required to possess a FRL including the floor slabs, walls, shafts, etc. must be protected in accordance with Clause C3.9, C3.12, C3.13 and C3.15 and Specification C3.15 of BCA 2019[Amdt 1].

9. The lift doors must be -/60/- fire doors complying with AS1735.11 in accordance Clause C3.10 of BCA 2019[Amdt 1].

10. Doorways and other openings in internal walls required to have an FRL must be protected in accordance with Clause C3.11 of BCA 2019[Amdt 1].

11. Columns protected by lightweight construction must achieve an FRL not less than the FRL for the element it is penetrating, in accordance with Clause 3.17 of BCA 2019[Amdt 1].

12. A lintel must 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 Clause 2.3 of BCA 2019[Amdt 1].

13. All attachments to the external facade of the building must be of a non-combustible material in accordance with Clause 2.4 of Specification C1.1 of BCA 2019[Amdt 1].

14. The top and bottom of the riser shafts must achieve an FRL not less than the FRL required for the walls of the shaft in accordance with Clause 2.7 of Specification C1.1 of BCA 2019[Amdt 1].

15. Fire doors must comply with AS1905.1 and Specification C3.4 of BCA 2019[Amdt 1].

16. The number of exits provided to the building must be in accordance with Clause D1.2 of BCA 2019[Amdt 1].

17. Travel distances to exits must be in accordance with Clause D1.4 of BCA 2019[Amdt 1].

18. The alternative exits must be distributed uniformly around the storey and must not be less than 9m apart, and not more than 45m apart in the residential portion or 60m, in accordance with Clause D1.5 of BCA 2019.

19. The dimensions of exits and paths of travel to exits must be provided in accordance with Clause D1.6 of BCA 2019[Amdt 1].

20. The discharge points of exits must be in accordance with Clause D1.10 of BCA 2019[Amdt 1].

21. Access to the lift pit must be in accordance with Clause D1.17 of BCA 2019[Amdt 1].

22. The construction of EDB's must be in accordance with Clause D2.7 of BCA 2019[Amdt1] with the enclosure bounded by a non-combustible or fire protective covering and smoke seals provided around the perimeter of the doors at each level.

23. The enclosing walls and ceiling under the non-fire-isolated stairway must achieve an FRL of 60/60/60, and a self-closing -/60/30 fire door, in accordance with Clause D2.8 of BCA 2019[Amdt 1].

24. New pedestrian ramps must comply with AS1428.1-2009, Clause D2.10 and Part D3 of BCA 2019[Amdt 1].The floor surface of a ramp must have a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586.

25. Stair geometry to the new stairways must be in accordance with Clause D2.13 of BCA 2019[Amdt 1]. Stair treads are to have a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586 or a nosing strip with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586.

26. Landings and door thresholds throughout the development must be provided in accordance with Clause D2.14 and D2.15 of BCA 2019[Amdt 1]. Landings to have either a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586 or a strip at the edge of the landing with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586 where the edge leads to a flight below.

27. The handrails and balustrades to all stairs and throughout the building must be in accordance with Clause D2.16 and D2.17 of BCA 2019.

28. Any 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 must comply with AS1657-2013 in lieu of Clause D2.12, D2.14, D2.16 and D2.17 of BCA 2019[Amdt 1].

29. The doorways and doors must be in accordance with Clause D2.19, D2.19 and D2.20 of BCA 2019.

30. The door latching mechanisms to the proposed required exit doors must be in accordance with Clause D2. 21 of BCA 2019.

31. Signage must be provided on fire and smoke doors in accordance with Clause D2.23 of BCA 2019.

32. The openable portion of a window in a bedroom of Class 2 parts must be protected with a restricting device or secure screen that does not allow a 125mm sphere to pass through the opening or screen and resist an outward horizontal action of 250N in accordance with Clause D2.24. In addition to window protection and for openable windows 4 meters or more above the ground below, a barrier with a height not less than 865mm above the floor to an openable window must be installed.

33. The new works must be accessible in accordance with Clause D3.1 and Table D3.1, D3.2, D3.3 of BCA 2019, and with AS1428.1-2009, with particular note to door circulation spaces, accessway widths, turning spaces and floor coverings, in accordance with Part D3 of BCA 2019[Amdt 1].

34. Accessible carparking must be in accordance with Clause D3.5, and Table D3.5 of BCA 2019[Amdt 1].

35. Braille and tactile signage must be in accordance with Clause D3.6, and specification D3.6 of BCA 2019[Amdt 1].

36. Tactile ground surface indicators must be provided in accordance with Clause D3.8 of BCA 2019[Amdt 1]and AS 1428.4.1-2009.

37. On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS1428.1-2009 and Clause D3.12 of BCA 2019[Amdt 1].

38. Fire precautions whilst the building is under construction fire precautions must be in accordance with Clause E1.9 of BCA 2019[Amdt 1].

39. Non-illuminated exit signage must be installed in accordance with Clause E4.7, and of BCA 2019[Amdt 1].

40. External above ground waterproofing membranes must comply with AS 4654 Parts 1 and 2.

41. The new roof covering must be in accordance with Clause F1.5 of BCA 2019[Amdt 1].

42. Waterproofing of all wet areas to the building must be carried out in accordance with Clause F1.7 of BCA 2019[Amdt 1]and AS3740.

43. Damp proofing of the proposed structure must be carried out in accordance with Clause F1.9 and F1.10 of BCA 2019[Amdt 1].

44. Floor wastes must be installed to bathrooms and laundries above sole occupancy units or public space in accordance with clause F1.11 of BCA 2019[Amdt 1].

45. All new glazing to be installed throughout the development must be in accordance with Clause F1.13 of BCA 2019[Amdt 1] and AS1288 / AS2047.

46. Sanitary facilities must be provided in the building in accordance with Clause F2.1, Table F2.1, Clause F2.3 and Table F2.3 of BCA 2019[Amdt 1], as applicable).

47. The construction of the sanitary facilities must be in accordance with Clause F2.5 of BCA 2019[Amdt 1].

48. Any slop-hopper will be provided in accordance with Clause F2.8 of Amdt 1..

49. Ceiling heights to the new areas must be in accordance with Clause F3.1 of BCA 2019[Amdt 1].

50. Natural light must be provided in accordance with Clause F4.1, F4.2, and F4.3 of BCA 2019[Amdt 1].

51. Natural ventilation must be provided in accordance with Clause F4.5, F4.6 and F4.7 of BCA 2019[Amdt 1].

52. The sanitary compartments must be either provided with mechanical exhaust ventilation or an airlock in accordance with Clause F4.9 of BCA 2019[Amdt 1].

53. The construction of the residential portions of the development must be undertaken in accordance with the relevant BASIX commitments that form part of the Development Consent approval.

54. Essential fire or other safety measures must be maintained and certified on an on-going basis, in accordance with the provisions of the Environmental Planning and Assessment Regulation, 2000.

55. Glazing must be in accordance with Part J2 of BCA 2019[Amdt 1].

56. Facilities for Energy Monitoring must be provided in accordance with Clause J8.3 of BCA 2019[Amdt 1].

Electrical Services Design Certification:

57. A smoke detection and alarm system must be installed throughout the building in accordance with Table E2.2a, and Specification E2.2a of BCA 2019[Amdt 1].

58. Emergency lighting must be installed throughout the development in accordance with Clause E4.2, E4.4 of BCA 2019[Amdt 1] and AS2293.1 – 2005.

59. Exit signage must be installed in accordance with Clause E4.5, E4.7, and E4.8 of BCA 2019[Amdt 1] and AS2293.1.

60. A sound systems and intercom systems for emergency purposes (formally an EWIS) will be provided to the building in accordance with Clause E4.9 of BCA 2019[Amdt 1].

61. Artificial lighting must be installed throughout the development in accordance Clause F4.4 of BCA 2019[Amdt 1] and AS/NZS 1680.0.

62. Lighting power and controls must be installed in accordance with Part J6 of BCA 2019[Amdt 1].

Hydraulic Services Design Certification:

63. Storm water drainage must be provided in accordance with Clause F1.1 of BCA 2019 and AS3500.3

64. Fire hydrants must be installed in accordance with Clause E1.3 of BCA 2019[Amdt 1] and AS2419.1-2005 as required.

65. Fire hose reels must be installed in accordance with Clause E1.4 of BCA 2019[Amdt 1] and AS2441-2005.

66. A sprinkler system will be installed throughout in accordance with Clause E1.5 of BCA 2019, Specification E1.5 and AS2118.

67. Portable fire extinguishers must be installed in accordance with Clause E1.6 of BCA 2019[Amdt 1] and AS2444-2005.

68. The heated water supply systems must be designed and installed to NCC Volume 3 – Plumbing code and Clause J7.2 of BCA 2019[Amdt 1].

Mechanical Services Design Certification:

69. An air-handling system, which does not form part of a smoke hazard management system, must be installed in accordance with Clause E2.2 of BCA 2019[Amdt 1], and AS/NZS 1668.1.

70. The building must be mechanically ventilated in accordance with Clause F4.5 of BCA 2019[Amdt 1] and AS1668.2-2012.

71. Every storey of the car park must be mechanically ventilated in accordance with Clause F4.11 of BCA 2019[Amdt 1]and AS1668.2-2012 as applicable.

72. The air-conditioning and ventilations systems must be designed and installed in accordance with Part J5 of BCA 2019[Amdt 1].

Structural Engineers Design Certification:

73. The material and forms of construction for the proposed works must be in accordance with Clause B1.2, B1.4 and B1.6 of BCA 2019 as follows:

    - Dead and Live Loads – AS1170.1
    - Wind Loads – AS1170.2
    - Masonry – AS3700
    - Concrete Construction – AS3600
    - Steel Construction – AS4100
    - Aluminium Construction – AS/NZS1664.1 or 2
    - ABCB Standard for Construction of Buildings in Flood Hazard Areas.

74. The FRL's of the structural elements for the proposed works have been designed in accordance with table 3 for a building of Type A Construction of Specification C1.1 of BCA 2019[Amdt 1].

75. The lift shaft must have a FRL in accordance with Clause C2.10 and Specification C1.1 of BCA 2019[Amdt 1].

76. Lightweight construction used to achieve required fire resistance levels must comply with Specification C1.8 of BCA 2019[Amdt 1].

77. The construction joints to the structure must be in accordance with Clause C3.16 of BCA 2019[Amdt 1] to maintain the FRL integrity of the element concerned.

78. Upon completion of the works, a structural engineer must be able to certify that local failure must be in accordance with Clause D2.2 of BCA 2019[Amdt 1]for the fire-isolated stairs.

Lift Services Design Certification:

79. Warning signage in accordance with Clause E3.3 of BCA 2019[Amdt 1]must be provided to the lifts to advise not to use the lifts in a fire.

80. Emergency lifts must be provided in the building in accordance with Clause E3.4 of BCA 2019[Amdt 1].

81. Fire service recall control switches must be installed on a landing at a location nominated by the appropriate authority in accordance with Clause E3.9.

82. Lift car fire service drive control switches must be installed within the lift car in accordance with Clause E3.10.

83. Access and egress to the lift well landings must comply with the Deemed-to-Satisfy Provisions of D3 of the BCA 2019, and must suitable to accommodate disabled persons.

84. The type lifts must also be suitable to accommodate persons with a disability in accordance with Clause E3.6, Table E3.6a, and must have accessible features in accordance with table E3.6b of BCA 2019[Amdt 1].

85. The new lift must comply with AS1735.12 in accordance with Clause E3.6 of BCA 2019[Amdt 1].

Acoustic Services Design Certification:

86. The sound transmission and insulation of the residential portions of the development must comply with Part F5 of BCA 2019[Amdt 1].

NSW Specification Design Certification:

87. Materials, floor and wall linings/coverings, surface finishes and air-handling ductwork used in the works must comply with the fire hazard properties in accordance with Clause C1.10, NSW Clause C1.10, Specification C1.10 and NSW Specification C1.10 of BCA 2019[Amdt 1].

88. Doorways and other openings in internal walls required to have an FRL must be protected in accordance with Clause C3.11, and NSW Clause C3.11 of BCA 2019[Amdt 1].
89. The number of exits provided to the building must be in accordance with Clause D1.2 and NSW Clause D1.2 of BCA 2019[Amdt 1].

90. The discharge points of exits must be in accordance with Clause D1.10, and NSW Clause D1.10 of BCA 2019[Amdt 1].

91. The dimensions of exits and paths of travel to exits must be provided in accordance with Clause D1.6, and NSW Clause D1.6 of BCA 2019[Amdt 1].

92. Stair geometry to the new stairways must be in accordance with Clause D2.13, and NSW Clause D2.13 of BCA 2019[Amdt 1]. Stair treads are to have a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586 or a nosing strip with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586.

93. Landings and door thresholds throughout the development must be provided in accordance with Clause D2.14 and D2.15, and NSW Clause D2.15 of BCA 2019[Amdt 1]. Landings to have either a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586 or a strip at the edge of the landing with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586 where the edge leads to a flight below.

94. The handrails and balustrades to all stairs and throughout the building must be in accordance with Clause D2.16, NSW Clause D2.16 and D2.17 of BCA 2019[Amdt 1].

95. The doorways and doors must be in accordance with Clause D2.19, NSW Clause D2.19 and D2.20 of BCA 2019[Amdt 1].

96. The door latching mechanisms to the proposed required exit doors must be in accordance with Clause D2.21 and NSW Clause D2.21 of BCA 2019[Amdt 1].

97. Access for maintenance to all services and their components must be provided in accordance with Clause NSW J8.2 of BCA 2019.

98. A smoke detection and alarm system must be installed throughout the building in accordance with Table E2.2a, NSW Table E2.2a and Specification E2.2a of BCA 2019.

99. Exit signage must be installed in accordance with Clause E4.5, NSW Clause E4.6, E4.7, and E4.8 of BCA 2019 and AS2293.1.

PART 6 STATEMENT OF COMPLIANCE

The architectural design documentation as referred to in this 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 B) with that Code.

Although demonstrating compliance with the BCA at the DA assessment stage is not a principal consideration under Section 4.15 of the Environmental Planning & Assessment Act 1979, Council has an obligation to consider whether the proposal, as lodged, is capable of complying with the BCA - without further modifications to those plans for which approval is sought.

In this instance we are confident that any modifications and advancement in the level of detailing required to the proposal in order to satisfy the requirements of the BCA (in force at the time the Construction Certificate application is lodged) will **not** necessitate any significant design changes that in turn would necessitate the submission of an application under Section 4.55 of the Environmental Planning and Assessment Act 1979.

Furthermore, we draw Council's attention to the requirements of clause 145 of the Environmental Planning & Assessment Regulation 2000 and suggest that detailed & specific BCA compliance matters shall be addressed to the satisfaction of the appointed Certifying Authority prior to the issue of the Construction Certificate. It is considered that this BCA review and the additional preparation of the required Construction Certificate documentation will be sufficient to ensure that the proposed design will achieve the necessary compliance with the BCA.

ANNEXURE A

DESIGN DOCUMENTATION

This report has been based on Architectural Plans prepared by PBD Architects the, as received on the 15 December 2020.

DRAWING LIST

DA 000	COVER PAGE
DA 001	PROJECT SUMMARY & AREA SCHEDULE
DA 002	DEMOLITION PLAN
DA 003	EXCAVATION & FILL PLAN
DA010	SITE ANALYSIS PLAN
DA011	SITE PLAN
DA 100	BASEMENT PLAN
DA 101	GROUND FLOOR PLAN
DA 102	LEVEL 1 PLAN
DA 103	LEVEL 2 PLAN
DA 104	ROOF PLAN
DA 201	ELEVATION (EAST & WEST)
DA 202	ELEVATION (NORTH)
DA 301	SECTIONS
DA 400	MATERIAL SCHEDULE

ANNEXURE B

DETAILED ASSESSMENT OF THE DEEMED-TO-SATISFY PROVISIONS OF BCA 2019[Amdt 1]

BUILDING ASSESSMENT

Outlined below is a detailed assessment of 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.

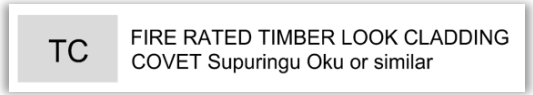
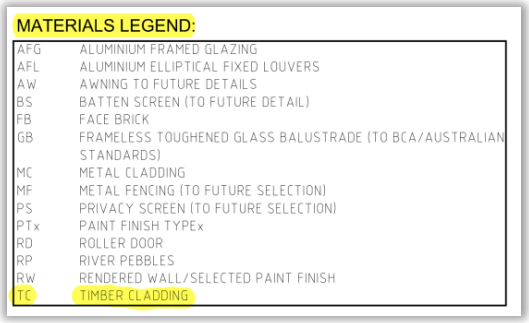
The abbreviations outlined below have been used in the following tables.

N/A	-	Not Applicable. The Deemed-to-Satisfy clause does not apply to the subject building.
Complies	-	The relevant provisions of the Deemed-to-Satisfy clause have been satisfied by the proposed design.
CRA	-	'COMPLIANCE READILY ACHIEVABLE'. It is considered that there was not enough information included in the documentation to accurately determine strict compliance with the individual clause requirements. However, subject to noting the requirements of each clause, compliance can be readily achieved. This information may be included in other documentation, which was not forwarded to this office for assessment, such as door schedules, electrical, mechanical and hydraulic design documentation or architectural specifications.
FI	-	Further Information is necessary to determine the compliance potential of the building design.
PS	-	Performance Solution with respect to this Deemed-to-Satisfy Provision is necessary to satisfy the relevant Performance Requirements.
DNC	-	Does Not Comply
Noted	-	BCA Clause simply provides a statement not requiring specific design comment or confirmation

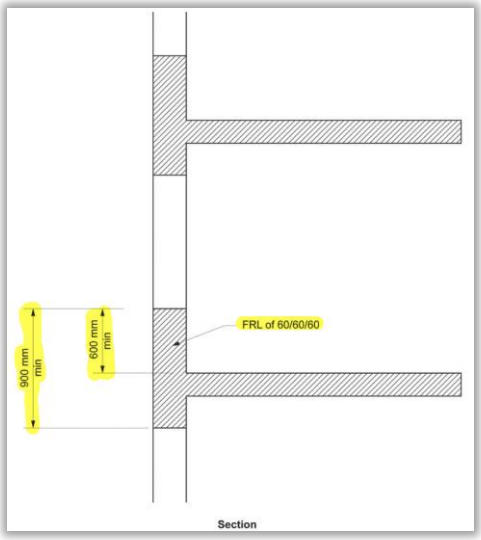
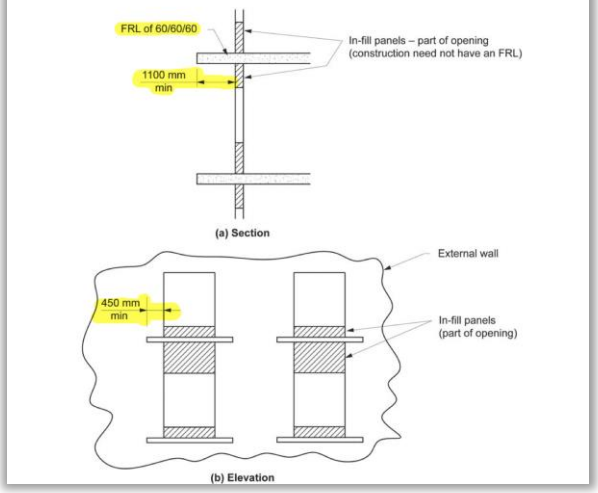
DEEMED-TO-SATISFY CLAUSE ASSESSMENT SUMMARY

Clause	Comment	Status
SECTION B: STRUCTURE		
PART B1 – STRUCTURAL PROVISIONS		
B1.0: Deemed-to-Satisfy Provisions	Noted	-
B1.1: Resistance to Actions	For Information Only – Structural Engineer to certify at CC stage.	CRA
B1.2: Determination of Individual Actions	No details of loads imposed upon the building – Structural Engineer to certify at CC stage.	CRA
B1.4: Determination of Structural Resistance of Materials and Forms of Construction	No details of materials and forms of construction – Structural Engineer, Architect and Manufacturers to certify at CC stage.	CRA
B1.5 Structural Software	Structural software used in computer-aided design of a building or structure within the geometrical limits of (b) of this Clause must comply with the ABCB Protocol for Structural Software. Structural Engineer to certify.	CRA
B1.6 Construction of Buildings in Flood Hazard Areas	A Class 2 or 3 building, Class 9a health care building, Class 9c aged-care building or Class 4 part of a building must comply the ABCB Standard for Construction of Buildings in Flood Hazard Areas.	**FI**

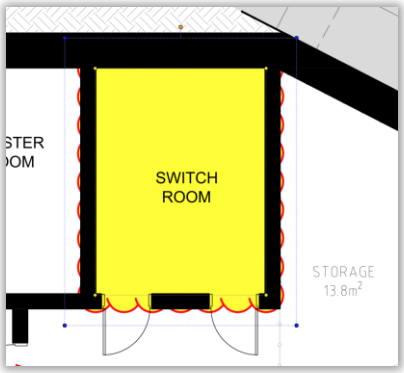
SECTION C: FIRE RESISTANCE		
PART C1 – FIRE RESISTANCE AND STABILITY		
C1.0: Deemed-to-Satisfy Provisions	Noted	-
C1.1: Type of Construction Required	The building is to be of Type A Construction.	CRA
C1.2: Calculation of Rise in Storeys	The proposed building has a rise in storeys of three (3).	Noted
C1.3: Buildings of Multiple Classification	The building is to be of Type A Construction.	CRA
C1.4: Mixed Types of Construction	The building is to be of Type A Construction.	CRA
C1.5: Two Storey Class 2, 3 or 9c Buildings	Not applicable	N/A
C1.6: Class 4 Parts of Buildings	Not applicable	N/A
C1.7: Open Spectator Stands and Indoor Sports Stadiums	Not applicable	N/A
C1.8: Lightweight Construction	Lightweight construction may be used to achieve required fire resistance levels. Should lightweight construction be proposed it is to comply with Specification C1.8.	CRA
C1.9: Non-combustible building elements	**a) <u>In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible:</u>** **i. External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation.** **ii. The flooring and floor framing of lift pits.** **iii. Non-loadbearing internal walls where they are required to be fire-resisting.** b) 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—** i. a building required to be of Type A construction; and ii. a building required to be of Type B construction, subject to C2.10, in A. a class 2, 3 or 9 building; and B. a class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys. **c) A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shaft, must comply with Specification C1.1.** d) The requirements of (a) and (b) do not apply to gaskets, caulking, sealants and damp-proof courses. e) The following materials may be used wherever a non-combustible material is required: i. Plasterboard. ii. Perforated gypsum lath with a normal paper finish. iii. Fibrous-plaster sheet. iv. Fibre-reinforced cement sheeting.	**FI (CC Stage)**

SECTION C: FIRE RESISTANCE		
	v. Pre-finished metal sheeting having a combustible surface finish not exceeding 1mm thickness and where the Spread-of-Flame Index of the product is not greater than 0. vi. Bonded laminated materials where— A. each lamina, including any core, is non-combustible; and B. each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2 mm; and C. 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. **Your attention is drawn to the proposed cladding or the like, whereby the properties for <u>non-combustibility</u> are to be clarified and confirmed pursuant of the Construction Certificate stage.**   	
C1.10: Fire Hazard Properties	No details have been submitted of the fire hazard properties of the materials and assemblies in the proposed building. Fire hazard indices to comply with Specification C1.10.	CRA
C1.11: Performance of External Walls in Fire	Not applicable	N/A
C1.13 Fire-protected timber: Concession	Assumed N/A unless advised otherwise	Assumed N/A
C1.14 Ancillary elements	An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is one of the following: a) **An ancillary element that is non-combustible**. b) A gutter, downpipe or other plumbing fixture or fitting. c) A flashing. d) A grate or grille not more than 2 m2 in area associated with a building service. e) An electrical switch, socket-outlet, cover plate or the like. f) A light fitting. g) A required sign. h) A sign other than one provided under **(a)** or **(g)** that— i. achieves a group number of 1 or 2; and ii. does not extend beyond one storey; and iii. does not extend beyond one fire compartment; and iv. is separated vertically from other signs permitted under (h) by at least 2 storeys. **i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that—** **i. meets the requirements of Table 4 of Specification C1.10 as for an internal element; and** **ii. serves a storey—** **A. at ground level; or**	**FI** **(CC Stage)**

SECTION C: FIRE RESISTANCE		
	B. immediately above a storey at ground level; and **iii. does not serve an exit, where it would render the exit unusable in a fire.** j) A part of a security, intercom or announcement system. k) Wiring. l) A paint, lacquer or a similar finish. m) A gasket, caulking, sealant or adhesive directly associated with **(a)** to **(k)**. **Details confirming compliance are to be submitted to the satisfaction of the PCA.**	
PART C2 - COMPARTMENTATION AND SEPARATION		
C2.0: Deemed-to-Satisfy Provisions	Noted	-
C2.1: Application of Part	Noted	-
C2.2: General Floor Area and Volume Limitations	The applicable parts appear to be under the area and volume limitations.	Complies
C2.3: Large Isolated Buildings	Not applicable	N/A
C2.4: Requirements for Open Spaces and Vehicular Access	Not applicable	N/A
C2.5: Class 9a and 9c Buildings	Not applicable	N/A
C2.6: Vertical Separation of Openings in External Walls	Any part of a window or other opening in an external wall is above another opening in the storey next below and its vertical projection falls no further than 450 mm outside the lower opening (measured horizontally), the openings must be separated by— i. a spandrel which is not less than 900mm in height; and extends **not less than 600mm above the upper surface** of the intervening floor; and is of non-combustible material having an **FRL of not less than 60/60/60**, or ii. part of a curtain wall or panel wall that complies with (i); or iii. construction that complies with **(i)** behind a curtain wall or panel wall and has any gaps packed with a non-combustible material that will withstand thermal expansion and structural movement of the walling without the loss of seal against fire and smoke; or iv. a slab or other horizontal construction that projects outwards from the external face of the wall **not less than 1100mm**; and extends along the wall not less than 450mm beyond the openings concerned; and is non-combustible and has an FRL of **not less than 60/60/60**. **It is acknowledged that the design incorporates a combination vertical and horizontal spandrel separation. Whilst an assessment has been carried out and compliance appears to be achieved, particular attention is required to ensure compliance is achieved with this provision.**	**FI** **CC Stage**

SECTION C: FIRE RESISTANCE		
	 Figure C2.6(2) Example showing use of slab or horizontal construction to separate external window openings 	
C2.7: Separation by Fire Walls	The fire wall has the relevant FRL prescribed by Specification C1.1 for each of the adjoining parts, and if these are different, the greater FRL. Any openings in a fire wall must not reduce the FRL required by Specification C1.1 for the fire wall, except where permitted by the Deemed-to-Satisfy Provisions of Part C3. It is acknowledged that the ground floor incorporates a *Class 2* part, being the *Residential part* and a *Class 6* part being the *Retail part*. In principle these two parts can be considered separate fire compartments however for the purposes of this assessment it is assumed the entire ground floor will achieve the higher of FRL's being 180/180/180 and therefore being considered as one fire compartment. Rationalising fire compartments can be considered further by the PCA at the Construction Certificate Stage. Any openings in the firewall must not reduce the FRL Required by Specification C1.1 for the fire wall.	FI CC Stage
C2.8: Separation of Classifications in the Same Storey	Where applicable, fire-rated walls are to comply with this clause. If a building has parts of different classifications located alongside one another in the same storey -	FI CC Stage

SECTION C: FIRE RESISTANCE		
	a) each building element in that storey must have the higher FRL prescribed in Specification C1.1 for that element for the classifications concerned; or b) the parts must be separated in that storey by a **fire wall** having— i. the higher FRL prescribed in Table 3 or 4; or ii. the FRL prescribed in Table 5, of Specification C1.1 as applicable, for that element for the Type of construction and the classifications concerned; or where one part is a carpark complying with Table 3.9, 4.2 or 5.2 of Specification C1.1, the parts may be separated by a fire wall complying with the appropriate Table. It is acknowledged that the ground floor incorporates a *Class 2* part, being the *Residential part* and a *Class 6* part being the *Retail part*. In principle these two parts can be considered separate fire compartments however for the purposes of this assessment it is assumed the entire ground floor will achieve the higher of FRL's being 180/180/180 and therefore being considered as one fire compartment. Rationalising fire compartments can be considered further by the PCA at the Construction Certificate Stage.	
C2.9: Separation of Classifications in Different Storeys	The floors between parts of different classifications must have an FRL of not less than that prescribed in Specification C1.1 for the classification of the lower storey. Please refer to part 4 of this report for details on FRL's.	**CRA** *(Refer to Clauses C2.7 & C2.8 above)*
C2.10: Separation of Lift Shafts	Any lift connecting **more than 2 storeys** (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 the walls have the relevant FRL prescribed by Specification C1.1 of the BCA 2019[Amdt 1] Openings for lift landing doors and services must be protected in accordance with the Deemed to-Satisfy Provisions of Part C3.	CRA Structural Engineer & Other stakeholders to ensure design compliance is achieved.
C2.11: Stairways and Lifts in One Shaft	Not applicable	N/A
C2.12: Separation of Equipment	Equipment including lift motor rooms, emergency generators sustaining emergency equipment operating in emergency mode, central smoke control plant, boilers or battery areas with a voltage exceeding 24 volts and a capacity exceeding 10 ampere hours are required to be fire separated from the remainder of the building in accordance with this clause. Separating construction must not be less than FRL 120/120/120 and have any doorway protected with a self-closing fire door having an FRL of not less than -/120/30. Details to be finalised at the Construction Certificate stage.	CRA
C2.13: Electricity Supply System	Any **electricity substation** and **main switchboard** located **within the building** which sustains emergency equipment operating in the emergency mode must— (i) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and (ii) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30.	CRA

SECTION C: FIRE RESISTANCE		
		
C2.14: Public Corridors in Class 2 and 3 Buildings	**Public Corridors in Class 2 and 3 Buildings** It is acknowledged that the ground floor corridor is provided with smoke doors which ensures the corridors are less then 40m in length 	CRA
PART C3 – PROTECTION OF OPENINGS		
C3.0: Deemed-to-Satisfy Provisions	Noted	-
C3.1: Application of Part	Noted	-
C3.2: Protection of Openings in External Walls	Openings in the east and west elevations of the building are located within 3m of the southern boundary from Level 1 to Level 2 and may not comply with C3.2 & C3.4 of the BCA. A combination of deemed-to-satisfy and performance solution may be necessary to achieve compliance with the BCA.	**PS** **Refer to Part 5 of this Report**
C3.3: Separation of External Walls and Associated Openings in Different Fire Compartments	The distance between parts of external walls and any openings within them in different fire compartments separated by a fire wall must not be less than that set out in Table C3.3, unless— a) those parts of each wall have an FRL not less than 60/60/60; and b) any openings protected in accordance with C3.4 of the BCA. Notwithstanding the above, given the commentary in respect of the clause within the Guide to the BCA 2019[Amdt 1], it is acknowledged that sole-occupancy units in class 2 parts on the upper levels are not fire compartments to which this clause applies.	CRA
C3.4: Acceptable Methods of Protection	Where applicable to any relevant opening, compliance with this clause is required in conjunction with clause C3.2 of the BCA. Typical compliance methods for openings: • **Doorways—** (A) internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or	CRA *(refer to clause C3.2 above)*

SECTION C: FIRE RESISTANCE		
	(B) –/60/30 fire doors that are self-closing or automatic closing. • **Windows—** (A) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or (B) –/60/– fire windows that are automatic closing or permanently fixed in the closed position; or (C) –/60/– automatic closing fire shutters. **Subject to clause C3.2 above.**	
C3.5: Doorways in Fire Walls	Fire doors are to be in accordance with this clause.	CRA
C3.6: Sliding Fire Doors	There does not appear to be any sliding fire doors proposed.	N/A
C3.7: Protection of Doorways in Horizontal Exits	Not applicable	N/A
C3.8: Openings in Fire-isolated Exits	The proposal does not appear to contain any fire isolated exits	N/A
C3.9: Service Penetrations in Fire-isolated Exits	Noted	Noted
C3.10: Openings in Fire-isolated Lift Shafts	If a lift shaft is required to be fire-isolated, an entrance doorway to that shaft must be protected by –/60/– fire doors that— (i) comply with AS 1735.11 ; and (ii) are set to remain closed except when discharging or receiving passengers, goods or vehicles. 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 mm² in area.	CRA
C3.11: Bounding Construction: Class 2, 3 and 4 Buildings	It is acknowledged that a conflict exists between the fire-rating requirements for *'bounding construction'* for sole-occupancy units, lift shaft construction and the doorways for such lift shafts. It is interpreted by *Building Control Group* that the following lift doors, illustrated below, are required to achieve an ***FRL of '-/60/30'***.  Where a deem-to-satisfy design is not proposed, a Fire-Engineered Performance Solution is to be prepared by a C10 Accredited Fire Engineer at the Construction Certificate stage in order to justify the non-compliance and is to address the relevant Performance Requirements of the BCA accordingly.	**PS** **Refer to Part 5 of this Report**
C3.12: Openings in Floors and Ceilings for Services	All services shafts are to have an FRL as required by Part 3.	CRA
C3.13: Openings in Shafts	Access to any service shafts is to be through an access panel, or self-closing fire door, having an FRL of not less than -/60/30. In the case of any garbage shaft — **a door or hopper of non-combustible construction.**	CRA
C3.15: Openings for Service Installations	Installations through fire rated walls, floors and other elements are to be protected via a method having an FRL relative to the wall they are penetrating.	CRA
C3.16: Construction Joints	Joints are to have the required FRL with respect to integrity and insulation relative to the building element they are joining.	CRA

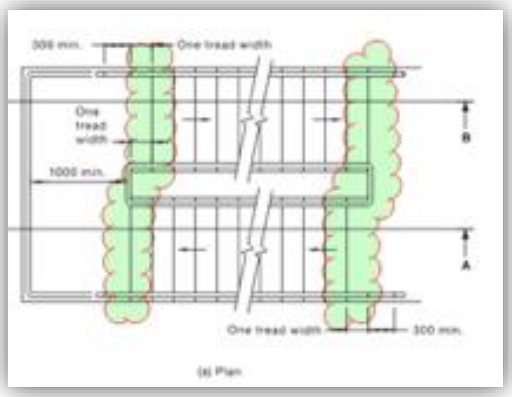
SECTION C: FIRE RESISTANCE		
C3.17: Columns Protected with Lightweight Construction to Achieve an FRL	It is considered that all columns will be of concrete construction and therefore will have sufficient fire resistance without the need for light weight construction to provide a FRL.	Noted
SPECIFICATION C1.1 – FIRE-RESISTING CONSTRUCTION		
2.0: General Requirements	Noted	-
2.1: Exposure to Fire-Source Features	Where openings are identified that are likely to be exposed to fire-source-features. Please confirm each in turn, mindful that there is no 'exposure' by another part of the building if there is an obstruction that — (i) has an FRL of not less than 30/–/–; and (ii) is neither transparent nor translucent.	Noted
2.2: Fire Protection for a Support of Another Part	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 must have an FRL not less than that required by other provisions of this Specification; and 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 for the supporting part itself and for the part it supports.	Noted
2.3: Lintels	Any new lintels must 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 is located in a non-loadbearing part of the Class 2 portion of the building.	Noted
2.4: Method of attachment not to reduce the fire-resistance of building elements	The method of attaching or installing a finish, lining, ancillary element or service installation to a building element must not reduce the fire-resistance of that element to below that required.	CRA
2.5: General Concessions	Concessions noted.	Noted
2.6: Mezzanine Floors: Concession	Not Applicable	N/A
2.7: Enclosure of Shafts	Fire rated shafts are required to be enclosed, at the top and bottom, with construction having an FRL required for the walls of a non-load-bearing shaft in the same building, unless the shaft extends beyond the roof covering, with the exception of fire isolated stair and lift shafts that are to have lids with a FRL regardless.	CRA
2.8: Carparks in Class 2 and 3 Buildings	Concessions noted.	Noted
2.9: Residential Care Building: Concession	Concessions noted.	Noted
3.0: Type A Fire-resisting Construction	Noted	-
3.1: Fire-resistance of Building Elements	The FRL's of all elements are to be in accordance with the FRL's detailed in the Table contained within Part 4.0 of this report	CRA
3.2: Concessions for Floors	A floor laid directly on the ground does not require a FRL.	Noted
3.3: Floor Loading of Class 5 and 9b Buildings: Concession	Not applicable	N/A
3.4: Roof Superimposed on Concrete Slab: Concession	If the roof is superimposed on a concrete slab it will not need a FRL if the superimposed roof is non-combustible and the concrete slab roof complies with Table 3 of Specification C1.1.	Noted
3.5: Roof: Concession	The roof does not require a FRL if it's covering is non-combustible as the building is Class 2.	Noted
3.6: Rooflights	Not applicable	N/A
3.7: Internal Columns and Walls: Concession	The loadbearing internal columns and walls, except fire walls and shaft walls, to the areas of building immediately below a roof may have a reduced FRL of 60/60/60 if the roof above complies with the concession granted by Clause 3.5 of Specification C1.1	Noted
3.8: Open Spectator Stands and Indoor Sports Stadiums: Concession	Not applicable	N/A
3.9: Carparks	Concession noted	Noted
3.10: Class 2 and 3 Buildings: Concession	Concession noted	Noted

SECTION C: FIRE RESISTANCE			
SPECIFICATION C1.8 - STRUCTURAL TESTS FOR LIGHTWEIGHT CONSTRUCTION			
1.	Scope	Noted	-
SPECIFICATION C1.10 - FIRE HAZARD PROPERTIES			
1.	Scope	Noted	-
2.	Application	For Information Only	Noted
3.	Floor linings and floor coverings	No details of Fire Hazard Indices of floor lining and floor covering materials have been submitted.	CRA
4.	Wall and ceiling linings	No details of Fire Hazard Indices of wall and ceiling lining materials have been submitted.	CRA
5.	Air-handling Ductwork	No details of Fire Hazard Indices of ductwork have been submitted.	CRA
6.	Lift Cars	No details of Fire Hazard Indices of Lift Car linings have been submitted.	CRA
7.	Other materials	No details of Fire Hazard Indices of all materials have been submitted.	CRA
SPECIFICATION C1.13 - CAVITY BARRIERS FOR FIRE-PROTECTED TIMBER			
1.	Scope	Noted	-
2.	Requirements	Not Applicable.	N/A
SPECIFICATION C3.4 – FIRE DOORS, SMOKE DOORS, FIRE WINDOWS AND SHUTTERS			
1.	Scope	Noted	-
2.	Fire Doors	Fire doors to comply with this clause and AS1905.1.	CRA
3.	Smoke Doors	Smoke doors to comply with this clause as applicable.	CRA
4.	Fire Shutters	Where required, to comply with this clause.	CRA
5.	Fire Windows	Where required, to comply with this clause.	CRA
SPECIFICATION C3.15 – PENETRATION OF WALLS, FLOORS AND CEILINGS BY SERVICES			
1.	Scope	Noted	-
2.	Application	Penetrations to be in accordance with this clause.	CRA
3.	Metal Pipe Systems	Penetrations to be in accordance with this clause.	CRA
4.	Pipes Penetrating Sanitary Compartments	Penetrations to be in accordance with this clause.	CRA
5.	Wires and Cables	Penetrations to be in accordance with this clause.	CRA
6.	Electrical Switches and Outlets	Penetrations to be in accordance with this clause.	CRA
7.	Fire-stopping	Penetrations to be in accordance with this clause.	CRA

SECTION D: ACCESS AND EGRESS			
PART D1 – PROVISION FOR ESCAPE			
D1.0:	Deemed-to-Satisfy Provisions	Noted	-
D1.1:	Application of Part	Noted	-
D1.2:	Number of Exits Required	**Basement** — 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. It is acknowledged that the basement accommodates 2 exits. **Retail -** It is acknowledged that the retail ground tenancies are provided with at least one exit each. **Residential Levels** – It is acknowledged that the residential levels are provided with at least one exit.	CRA

SECTION D: ACCESS AND EGRESS		
D1.3: When Fire-Isolated Stairways and Ramps are Required	Every stairway serving as a required exit must be fire-isolated unless it connects, passes through or passes by not more than 3 consecutive storeys in a Class 2 building and one extra storey of any classification may be included if the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having— (A) an FRL of –/60/60, if non-loadbearing; and (B) an FRL of 90/90/90, if loadbearing; and (C) no opening that could permit the passage of fire or smoke.	CRA
D1.4: Exit Travel Distances	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 40m. **Refer to Part 5 of this report.**	**PS** **Refer to Part 5 of this report.**
D1.5: Distance Between Alternative Exits	Exits that are required as alternative means of egress must be— a) distributed as uniformly as practicable within or around the storey served and in positions where unobstructed access to at least 2 exits is readily available from all points on the floor including lift lobby areas; and b) not less than 9m apart; and c) not more than - in a Class 2 or 3 building — 45m apart; or in all other cases — 60m apart; and d) located so that alternative paths of travel do not converge such that they become less than 6m apart.	Complies
D1.6: Dimensions of Exits and Paths of Travel to Exits	The car parking exits are to be sized to accommodate the anticipated population where at least 1000mm is provided **between handrails/walls,** as appropriate. The residential exits appear to be sized to accommodate the anticipated population where at least 1000mm is provided **between handrails/walls,** as appropriate. It is acknowledged that each retail tenancy on the ground floor achieved direct egress to open space and is considered appropriately sized to accommodate the anticipated population. Notwithstanding the above, given the uncertainty of the proposed use of the retails parts at this stage, either the base building certifier or the fitout certifier will need to revisit and assess compliance accordingly.	FI
D1.7: Travel via Fire-Isolated Exits	A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated unless it is from– (a) a public corridor, public lobby or the like; or (b) a sole-occupancy unit occupying all of a storey; or (c) a sanitary compartment, airlock or the like. 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 to a road or open space;	CRA
D1.8: External Stairways or Ramps In lieu of Fire-Isolated Exits	Not applicable	N/A
D1.9: Travel by Non-Fire-Isolated Stairways or Ramps	It is acknowledged that there is one fire stair serving the basement level which is not 'required' to be a fire-isolated exits, however, they may be constructed as such. It is acknowledged that the stairways serving the residential levels have been design as a non-fire-isolated stairs and provides continuous means of travel to the level at which egress to a road or open space is provided.	CRA
D1.10: Discharge from Exits	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. 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	CRA

SECTION D: ACCESS AND EGRESS		
	to the road must be by 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 D3 or **a stairway** complying with the Deemed-to-Satisfy Provisions of the BCA.	
D1.11: Horizontal Exits	Not applicable	N/A
D1.12: Non-Required Stairways, Ramps or Escalators	Not applicable	N/A
D1.13: Number of Persons Accommodated	Populations have been assessed in accordance with Table D1.13. • Residential units – 2 persons per bedroom • Each Retail tenancy is can accommodate a maximum egress population of not more than 100 occupants	CRA
D1.14: Measurement of Distances	Information only.	Noted
D1.15: Method of Measurement	Information only.	Noted
D1.16: Plant Rooms, Lift Motor Rooms and electricity network substations: Concession	An AS1657 ladder may be used to serve such rooms in lieu of a stairway to form part of a path of travel discharging into a storey.	CRA
D1.17: Access to Lift Pits	Access to the lift pit is assumed to be through the bottom landing doors as the pit is assumed to be less than 3m deep.	CRA
PART D2 – CONSTRUCTION OF EXITS		
D2.0: Deemed-to-Satisfy Provisions	Noted	-
D2.1: Application of Part	Noted	-
D2.2: Fire-Isolated Stairways and Ramps	It is assumed that the stairways will be constructed of reinforced concrete or steel. The structural engineer is to certify that the shaft will withstand a local failure.	CRA
D2.3: Non-Fire-Isolated Stairways and Ramps	It is assumed that the applicable stairways are constructed of reinforced or prestressed concrete; or steel in no part less than 6mm thick.	CRA
D2.4: Separation of Rising and Descending Stair Flights	Compliance appears to be achieved as the respective exits are separated.	Complies
D2.5: Open Access Ramps and Balconies	Not applicable.	N/A
D2.6: Smoke Lobbies	Not applicable.	N/A
D2.7: Installations in Exits and Paths of Travel	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. Services or equipment comprising— (i) electricity meters, distribution boards or ducts; or (ii) central telecommunications distribution boards or equipment; or (iii) electrical motors or other motors serving equipment in the building, **may be installed in—** **(iv) a required exit, except for fire-isolated exits specified in (a); or** **(v) in any corridor, hallway, lobby or the like leading to a required exit,** **if the services or equipment are enclosed by non-combustible construction or a fire-protective covering with doorways or openings suitably sealed against smoke spreading from the enclosure.**	CRA
D2.8: Enclosure of Space Under Stairs and Ramps	**Non-fire-isolated stairways and ramps** — The space below a required non fire-isolated must not be enclosed to form a cupboard or other enclosed space unless— i. the enclosing walls and ceilings have an FRL of not less than 60/60/60; and ii. any access doorway to the enclosed space is fitted with a self-closing –/60/30 fire door.	CRA
D2.9: Width of Stairways and Ramps	A required stairway or ramp that exceeds 2m in width is counted as having a width of only 2m unless a handrail divides it, balustrade or other barrier continuous between landings and each division has a width of not more than 2m.	CRA
D2.10: Pedestrian Ramps	Not Applicable	N/A
D2.11: Fire-Isolated Passageways	Not Applicable	N/A

SECTION D: ACCESS AND EGRESS		
D2.12: Roof as Open Space	Not applicable.	N/A
D2.13: Goings and Risers	Stair geometry to all stairs throughout the development is to comply with Table D2.13. Stair treads are to have a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586 or a nosing strip with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586.	CRA
D2.14: Landings	Landings to have either a surface with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586 or a strip at the edge of the landing with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS 4586 where the edge leads to a flight below.	CRA
D2.15: Thresholds	Threshold ramps and step ramps in a building are required to be accessible in accordance with Part D3.	CRA
D2.16: Barriers to prevent falls	Balustrades are required to be 1m above the floor of any balcony, path or the like; also, barriers to windows where a change in level of 4m occurs are to be provided. **Details of the dimensions of the balustrading to the stairways, balconies and windows have not been supplied at this stage.**	CRA
D2.17: Handrails	Compliance with this clause is required as applicable. A required exit **(fire isolated or non-fire isolated)** serving an area required to be accessible must be fitted with handrails in accordance with **Clause 12** of AS1428.1-2009. **Your attention is drawn to all stairways.** Furthermore, your attention is also drawn to the need to achieve compliance with subsections (d) and (e) of clause 12 of AS1428.1-2009, see below example:  Handrails to a stairway **<u>within a sole-occupancy unit</u>** in a Class 2 building must — i. be located along at least one side of the flight; and ii. be located along the <u>full length of the flight</u>, except in the case where a handrail is associated with a barrier, the handrail may terminate where the barrier terminates; and iii. have the top surface of the handrail not less than 865 mm vertically above the nosings of the stair treads or the floor surface of the ramp; and iv. have no obstruction on or above them that will tend to break a handhold, except for newel posts, ball type stanchions, or the like.	**FI** **CC Stage**

SECTION D: ACCESS AND EGRESS		
D2.18: Fixed Platforms, Walkways Stairways and Ladders	A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail, balustrade or other barrier attached thereto may comply with AS 1657 in lieu of D2.13, D2.14, D2.16 and D2.17 if it only serves: (a) machinery rooms, boiler houses, lift-machine rooms, plant-rooms, and the like; or (b) non-habitable rooms, such as attics, storerooms and the like that are not used on a frequent or daily basis in the internal parts of a sole-occupancy unit in a Class 2 building or Class 4 part of a building.	CRA
D2.19: Doorways and Doors	A doorway serving as a required exit or forming part of a required exit must not be fitted with a sliding door unless it leads directly to a road or open space; and the door is able to be opened manually under a force of not more than 110 N. If fitted with a door which is power-operated, 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 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. A power-operated door in a path of travel to a required exit must be able to be opened manually under a force of not more than 110N if there is a malfunction or failure of the power source. A doorway serving as a required exit or forming part of a required exit,— i. must not be fitted with a revolving door; and ii. must not be fitted with a roller shutter or tilt-up door unless— A. it serves a Class 6, 7 or 8 building or part with a floor area not more than 200m^2; and B. the doorway is the only required exit from the building or part; and C. it is held in the open position while the building or part is lawfully occupied.	CRA
D2.20: Swinging Doors	A swinging door in a required exit or forming part of a required exit **must not encroach on any part of its swing more than 500mm on the required width of the exit** and must swing in the direction of egress. When fully open, must not encroach by more than 100mm on the 'required width' of the required exit, and the measurement of encroachment in each case **is to include door handles or other furniture or attachments to the door**; and must not otherwise impede the path or direction of egress.	**CRA**
D2.21: Operation of Latch	Lever action door handles are to have an end return to prevent a person who cannot grip the handle from slipping off during operation. All clearances to be maintained between 35-45mm measured from the door face to the centre grip section of the handle. **Details of latch handles have not been supplied at this stage.**	CRA
D2.22: Re-entry from Fire-Isolated Exits	Not Applicable	N/A
D2.23: Signs on Doors	Required signage is to be located on all fire and smoke doors stating "Fire Safety Door, Do Not Obstruct, Do Not Keep Open" and the discharge door from the fire isolated stairways are to state "Fire Safety Door – Do Not Obstruct" in capital letters not less than 20mm in height.	CRA
D2.24: Protection of Openable Windows	In a bedroom within a class 2 building, all windows above an external surface area of 2m must be protected. Where the lowest level of the window opening is less than 1.7m above the floor, the openable portion of the window must be protected with a restricting device or secured screen with secured fixings. A barrier below an openable window must be a minimum height of 865mm in any bedroom within a class 2 part.	CRA

SECTION D: ACCESS AND EGRESS		
	A barrier below an openable window must be a minimum height of 865mm in all classes, 4m above the external surface area. *Note: when considering the preferred option to comply with this clause consideration will need to be given to natural ventilation required under Clause F4.6.*	
D2.25 Timber stairways: Concession	Not applicable	N/A
NSW D2.101: Doors in Path of Travel in a Place of Public Entertainment	Not applicable	N/A

PART D3 - ACCESS FOR PEOPLE WITH A DISABILITY
See separate Accessibility Report prepared by Building Control Group *No assessment of access for people with a disability has been carried out as part of this report.*

SECTION E: SERVICES AND EQUIPMENT		
PART E1 – FIRE FIGHTING EQUIPMENT		
E1.0: Deemed-to-Satisfy Provisions	Noted	-
E1.3: Fire Hydrants	The building is to be provided with a fire hydrant system complying with AS2419.1-2005. In consideration of the above, it appears that the proposed booster assembly is affixed to the building and does not appear to comply with the following: • Operable by fire brigade pumping appliances ***located within 8m*** • Separated from the building by a construction with a fire resistance rating of not less than FRL 90/90/90 ***for a distance of not less than 2m each side of and 3m above the upper hose connections in the booster assembly.*** **Details to be submitted to the satisfaction of the nominated PCA at the CC Stage.**	**PS** **Refer to Part 5 of this report**
E1.4: Fire Hose Reels	The building is to be provided with a fire hose reel system complying with the 2019 Amdt 1 version of the BCA and AS2441-2005. All FHR's to the carpark and retails parts and are to be within 4m of an exit. **Please provide coverage diagrams at the Construction Certificate stage to determine the level of fire hose reel coverage.**	**FI** **(CC stage)**
E1.5: Sprinklers	Not applicable	N/A
E1.6: Portable Fire Extinguishers	The building is to be provided with extinguishers in accordance with this clause and AS2444. Portable fire extinguishers must be— iv. provided as listed in Table E1.6; and v. for a Class 2 or 3 building or Class 4 part of a building, provided— (C) to serve the whole Class 2 or 3 building or Class 4 part of a building where one or more internal fire hydrants are installed; or (D) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500m², and for the purposes of this clause, a sole-occupancy unit in a Class 2 or 3	**PS** **Refer to Part 5.2 of this report**

SECTION E: SERVICES AND EQUIPMENT		
	building or Class 4 part of a building is considered to be a fire compartment; and vi. Subject to below, selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444. **Portable fire extinguishers provided in a Class 2 or 3 building or Class 4 part of a building must be—** **(i) an ABE type fire extinguisher; and** **(ii) a minimum size of 2.5 kg; and** **(iii) distributed outside a sole-occupancy unit—** **(A) to serve only the storey at which they are located; and** **(B) so that the travel distance from the entrance doorway of any sole-occupancy unit to the nearest fire extinguisher is not more than 10m.** **Comment** It is acknowledged that Unit 201,202 & 203 do not accommodate a common corridor and therefore compliance with the provision of this clause may not be able to be achieved given a fire extinguisher may not be able to be positioned not more than 10m from the entrance doorway of these sole-occupancy units. Alternatively, where a deemed-to-satisfy design proposal is not achieved, a Fire-Engineered Performance Solution will need to be prepared by a C10 Accredited Fire Engineer at the Construction Certificate stage in order to justify the non-compliance and is to address the relevant Performance Requirements of the BCA accordingly.	
E1.8: Fire Control Centres	Not Applicable	N/A
E1.9: Fire Precautions During Construction	Information only. Whilst the building is under construction there is to be not less than one fire extinguisher provided at all times to each storey. Once the building has reached an effective height of over 12m the hydrants and hose reels and booster connections must be operational to all levels except the 2 uppermost storeys under construction.	Noted
PART E2 – SMOKE HAZARD MANAGEMENT		
E2.0: Deemed-to-Satisfy Provisions	Noted	-
E2.1: Application of Part	Noted	-
E2.2: General Requirements (including Tables E2.2a and E2.2b)	Given that the building is less than 25m in Effective Height, the following fire safety measures are required in the building: a) The Class 2 parts of the building must be provided with an **automatic smoke detection and alarm system** complying with Specification E2.2a. b) The Class 6 parts of the building must be provided with an **automatic smoke detection and alarm system** complying with Specification E2.2a. c) The Class 7a basement, is to be provided with a **mechanical ventilation system** in accordance with AS 1668.2 must comply with clause 5.5 of AS/NZS 1668.1 except that— i. fans with metal blades suitable for operation at normal temperature may be used; and ii. the electrical power and control cabling need not be fire rated.	CRA *(Subject to Accredited Fire Safety Designer Documentation)*
E2.3: Provisions for Special Hazards	Noted	Noted
SPECIFICATION E2.2a – SMOKE DETECTION AND ALARM SYSTEMS		
1. Scope	Noted	-
2. Type of System	The smoke detection and alarm system may comply with Clauses 4 through to 7 of this specification.	Noted
3. Smoke Alarm System	Not Required	N/A

SECTION E: SERVICES AND EQUIPMENT		
4. Smoke Detection System	**The smoke detection and alarm system is comply with this clause.**	CRA
5. Combined smoke alarm and smoke detection system	**The combined smoke alarm and detection system may comply with this clause.**	CRA
6. Smoke Detection for Smoke Control Systems	**The Smoke Detection for Smoke Control Systems is required to comply with this clause.**	CRA
7. Building Occupant Warning System	**The smoke detection and alarm system is required to comply with this clause.**	CRA
8. System Monitoring	Not Applicable	N/A
SPECIFICATION E2.2d – SMOKE DETECTION AND ALARM SYSTEMS		
1. Application	Noted	-
2. Residential Local Fire Alarm Systems	Not Applicable	N/A
3. Connection of Residential Sprinkler Systems to a Fire Station or Other Approved Monitoring Service	Not Applicable	N/A
PART E3 – LIFT INSTALLATIONS		
E3.0: Deemed-to-Satisfy Provisions	Noted	-
E3.1: Lift Installations	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification E3.1.	CRA
E3.2: Stretcher Facility in Lifts	Not Applicable	N/A
E3.3: Warning Against Use of Lifts in Fire	Warnings against using the lifts in the event of a fire must be provided in accordance with this clause.	CRA
E3.4: Emergency Lifts	Not Applicable	N/A
E3.5: Landings	Access and egress to and from liftwell landings must comply with the Deemed-to-Satisfy Provisions of Section D.	CRA
E3.6: Passenger Lifts	Every passenger lift must be one of the types identified in Table E3.6a, subject to the limitations on use specified in the Table; and have accessible features in accordance with Table E3.6b; and not rely on a constant pressure device for its operation if the lift car is fully enclosed.	CRA *(Subject to separate Access review)*
E3.7: Fire Service Controls	As the lift does not serve a storey above an effective height of 12m, the following is not required: a) A fire control switch complying with E3.9 for— (i) a group of lifts; or (ii) a single lift not in a group that serves the storey. b) A lift car fire service drive control switch complying with E3.10 for every lift.	CRA
E3.8: Residential Care Buildings	Not applicable	N/A
E3.9: Fire Service Recall Operation Switch	The lift must be provided with one fire service recall control switch required by E3.7 that activates the fire service recall operation.	CRA
E3.10: Lift Car Service Drive Control Switch	The lift car fire service drive control switch required by E3.7 must be activated from within the lift car.	CRA
SPECIFICATION E3.1 – LIFT INSTALLATIONS		
1. Scope	Noted	-
2. Lift Cars Exposed	The lift is to comply with this clause, if applicable.	CRA
3. Lift Car Emergency Lighting	The lift is to comply with this clause.	CRA
4. Cooling of Lift Shaft	The lift is to comply with this clause.	CRA
5. Lift Foyer Access	The lift is to comply with this clause.	CRA
6. Emergency Access Doors in a Single Enclosed Lift Shaft	If applicable, the lift is to comply with this clause.	CRA
PART E4 – EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS		
E4.0: Deemed-to-Satisfy Provisions	Noted	-
E4.2: Emergency Lighting Requirements	Emergency lighting is to be installed in the fire-isolated exit, each floor level, non-isolated stairway, common corridor and the like throughout the building.	CRA
E4.3: Measurement of Distance	Information Only	

SECTION E: SERVICES AND EQUIPMENT		
E4.4: Design and Operation of Emergency Lighting	To comply with AS 2293.1-2018.	CRA
E4.5: Exit Signs	Exits signs are to be provided above or adjacent to a door providing egress as well as directional signage throughout the entire development where necessary.	CRA
E4.6: Direction Signs	Where an exit is not readily apparent a directional sign is to be installed indicating the direction of egress being primarily within the carpark areas.	CRA
E4.7: Class 2 and 3 Buildings and Class 4 Parts: Exemptions	For Information Only	Noted
E4.8: Design and Operation of Exit Signs	To comply with AS/NZS 2293.1-2018 and/or Specification E4.8.	CRA
E4.9: Sound Systems and Intercom Systems for Emergency Purposes	A sound system and intercom system for emergency purposes complying with AS 1670.4 is required in the building.	CRA
SPECIFICATION E4.8 – Photoluminescent Exit Signs		
1. Scope	Noted	-
2. Application	If used, photoluminescent exit signs are to comply with this clause.	CRA
3. Illumination	If used, photoluminescent exit signs are to comply with this clause.	CRA
4. Pictorial Elements	If used, photoluminescent exit signs are to comply with this clause.	CRA
5. Viewing Distance	If used, photoluminescent exit signs are to comply with this clause.	CRA
6. Smoke Control Systems	If used, photoluminescent exit signs are to comply with this clause.	CRA

SECTION F: HEALTH AND AMENITY		
PART F1 – DAMP AND WEATHERPROOFING		
FP1.4 Weatherproofing	A roof and *external wall* (including openings around *windows* and doors) must prevent the penetration of water that could cause— (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements. **It should be acknowledged that there are no deemed to satisfy provision to achieve compliance with this provision. Details to be submitted to the satisfaction of the PCA at the CC Stage.**	**FI** CC Stage
F1.0: Deemed-to-Satisfy Provisions	Noted	-
F1.1: Stormwater Drainage	Stormwater drainage to comply with AS 3500.3.	CRA
F1.4: External Above Ground Membranes	Waterproofing membranes for external above ground use to comply with AS 4654 Parts 1 and 2.	CRA
F1.5: Roof Coverings	Roof coverings to comply with this clause.	CRA
F1.6: Sarking	The sarking is to comply with AS 4200.	CRA
F1.7: Water Proofing of Wet Areas in Buildings	Waterproofing to wet areas to comply with AS 3740.	CRA
F1.9: Damp-proofing	Moisture is to be prevented from reaching the walls above a damp-proof course, and the underside of the suspended floors.	CRA
F1.10: Damp-proofing of Floors on the Ground	A vapour barrier in accordance with AS 2870 must be installed.	CRA
F1.11: Provision of Floor Wastes	In Class 2 or 3 buildings or Class 4 part of a building, a bathroom or laundry is to have a floor waste where the floor is graded to the floor waste to permit the drainage of water.	CRA
F1.12: Sub-floor Ventilation	Not applicable	N/A
F1.13: Glazed Assemblies	Glazed assemblies are to comply with AS 2047 and AS 1288.	CRA
PART F2 – SANITARY AND OTHER FACILITIES		
F2.0: Deemed-to-Satisfy Provisions	Noted	-
F2.1: Facilities in Residential Buildings (including Table F2.1)	**Facilities for residents in a class 2 building shall include;** (a) a bath or shower; and (b) a closet pan; and (c) a washbasin	**Complies**

SECTION F: HEALTH AND AMENITY		
F2.2: Calculation of Number of Occupants and Facilities	In calculating the number of sanitary facilities to be provided under F2.1 and F2.3, a unisex facility required for people with a disability may be counted once for each sex.	Noted
F2.3: Facilities in Class 3 to 9 Buildings (including Table F2.3)	It is acknowledged that 2 accessible sanitary facility have been proposed on the ground floor for the use of the retail tenancies. Sanitary facilities must be provided in accordance with this clause and Table F2.3. The final allocation and assessment will depend on the actual use of the retail and commercial tenancies.	FI
F2.4: Accessible Sanitary Facilities (including Table F2.4)	*See separate Accessibility Report prepared by Building Control Group*	Note
F2.5: Construction of Sanitary Compartments	Where the pans to the bathroom areas are within 1.2m of the doorway with the doorway swinging inwards. In these instances, the doors are to be removable from outside the bathroom. Sanitary compartments must have doors and partitions that separate adjacent compartments and extend— (i) from floor level to the ceiling in the case of a unisex facility; or (ii) to a height of not less than 1.5 m above the floor if primary school children are the principal users; or (iii) 1.8 m above the floor in all other cases.	CRA
F2.6: Interpretation: Urinals and Washbasins	Noted	
F2.8: Waste Management	Not applicable	N/A
F2.9: Accessible Adult Change Facilities	Not applicable	N/A
PART F3 – ROOM SIZES		
F3.0: Deemed-to-Satisfy Provisions	Noted	-
F3.1: Height of Rooms and Other Spaces	The ceiling height must be not less than— (a) in a Class 2 part— • a kitchen, laundry, or the like — 2.1 m; and • a corridor, passageway or the like — 2.1 m; and • a habitable room excluding a kitchen — 2.4 m; In the Class 5, 6, 7 building— (i) except as allowed in (ii) and (f) of this clause -2.4 m; and (ii) a corridor, passageway, or the like — 2.1 m; In any building— (i) a bathroom, shower room, sanitary compartment, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like — 2.1 m; and (ii) a commercial kitchen — 2.4 m; and (iv) above a stairway, ramp, landing or the like — 2m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like.	CRA
PART F4 – LIGHT AND VENTILATION		
F4.0: Deemed-to-Satisfy Provisions	Noted	-
F4.1: Provision of Natural Light	Natural light is required to be provided to habitable areas of the residential units.	
F4.2: Methods and Extent of Natural Lighting	Required natural lighting must be provided by windows, excluding roof lights, that have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 10% of the floor area of the room, and are open to the sky or face a court or other space open to the sky or an open verandah.	CRA
F4.3: Natural Light Borrowed from Adjoining Room	Natural lighting to a habitable room in a Class 2 part may come through a **glazed panel or opening** from an adjoining room (including an enclosed verandah) if the glazed panel or opening has **an area of not less than 10% of the floor area of the room** to which it provides light; and the adjoining room has windows, that— a) have an aggregate light transmitting area of not less than 10% of the combined floor areas of both rooms; and b) are open to the sky or other space open to the sky or an open verandah.	CRA
F4.4: Artificial Lighting	Lighting to all areas is to comply with AS1680.0.	CRA

SECTION F: HEALTH AND AMENITY		
F4.5: Ventilation of Rooms	Natural or mechanical ventilation, complying with AS1668.1, will be provided.	CRA
F4.6: Natural Ventilation	Natural ventilation provided in accordance with clause F4.5(a) of the BCA must consist of permanent openings, windows, doors or other devices which can be opened with an aggregate opening or openable size not less than 5% of the floor area of the room required to be ventilated; and open to a suitably sized court, or space open to the sky; or an open verandah or an adjoining room in accordance with F4.7.	CRA
F4.7: Ventilation Borrowed from Adjoining Room	Natural ventilation to a room may come through a window, opening, door or other device from an adjoining room (including an enclosed verandah) if both rooms are within the same sole-occupancy unit and in a Class 2 building or part of a building, the window, opening, door or other device has a ventilating area of not less than 5% of the floor area of the room to be ventilated; and the adjoining room has a window, opening, door or other device with a ventilating area of not less than 5% of the combined floor areas of both rooms.	CRA
F4.8: Restriction on Position of Water Closets and Urinals	It is assumed that all bathrooms, ensuites and WC's will be mechanically exhausted. Please advise to the contrary.	CRA
F4.9: Airlocks	It is assumed that all bathrooms, ensuites and WC's will be mechanically exhausted. Please advise to the contrary.	CRA
F4.11: Carparks	Mechanical Ventilation complying with AS 1668.2-2012 or Natural Ventilation complying with AS 1668.4-2012 is to be provided to the carpark.	CRA
F4.12: Kitchen Local Exhaust Ventilation	Not applicable	N/A
PART F5 – SOUND TRANSMISSION AND INSULATION		
F5.0: Deemed-to-Satisfy Provisions	Noted	-
F5.1: Application of Part	Noted	-
F5.2: Determination of Airborne Sound Insulation Ratings	For Information Only	Noted
F5.3: Determination of Impact Sound Insulation Ratings	For Information Only	Noted
F5.4: Sound Insulation Rating of Floors	The floor separating the sole occupancy units must have a R_w + C^tr (airborne) not less than 50 and an $L_{n,w}$ + C_1 (impact) not more than 62 if it separates SOU's or SOU's from plant or other public areas.	CRA
F5.5: Sound Insulation Rating of Walls	**The walls separating the sole occupancy units must have a R_w + C^tr (airborne) not less than 50, and an R_w not less than 50 where the wall separates a SOU and public area or plant room. Doors to SOU's are to also have an R_w not less than 30.**	**PS Refer to Part 5 of this Report**
F5.6: Sound Insulation Rating of Services	If a soil or waste pipe passes through more than one unit the pipe must be separated from the rooms with construction that has a R_w + C^tr (airborne) not less than 45 if adjacent to a habitable room, or 25 if adjacent to a kitchen or other room.	CRA
F5.7: Sound Isolation of Pumps	For information only.	
SPECIFICATION F5.2 – SOUND INSULATION FOR BUILDING ELEMENTS		
1. Scope	Noted	-
2. Construction Deemed-to-Satisfy	Information only.	Noted
SPECIFICATION F5.5 – IMPACT SOUND – TEST OF EQUIVALENCE		
1. Scope	Noted	-
2. Construction to be Tested	Information only.	Noted
3. Method	Information only.	Noted
PART F6 – CONDENSATION MANAGEMENT		
F6.1: Application of Part	Only applies to a Sole Occupancy Unit of a Class 2 building and class 4 part.	Noted
F6.2: Pliable building membrane	(a) Where a pliable building membrane is installed in an external wall, it must— (i) comply with AS/NZS4200.1; and (ii) be installed in accordance withAS4200.2; and (iii) be a vapour permeable membrane for climate zones 6, 7 and 8; and	CRA

SECTION F: HEALTH AND AMENITY		
	(iv) be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building. (b) Except for single skin masonry and single skin concrete, where a pliable building membrane is not installed in an external wall, the primary water control layer must be separated from water sensitive materials by a drained cavity.	
F6.3: Flow Rate and Discharge of exhaust systems	(a) An exhaust system installed in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of— (i) 25 L/s for a bathroom or sanitary compartment; and (ii) 40 L/s for a kitchen or laundry. (b) Exhaust from a kitchen must be discharged directly or via a shaft or duct to outdoor air. (c) Exhaust from a bathroom, sanitary compartment, or laundry must be discharged— (i) directly or via a shaft or duct to outdoor air; or (ii) to a roof space that is ventilated in accordance with F6.4	CRA
F6.4: Ventilation of roof spaces	(a) Where an exhaust system covered by F6.3 discharges directly or via a shaft or duct into a roof space, the roof space must be ventilated to outdoor air through evenly distributed openings. (b) Openings required by (a) must have a total unobstructed area of 1/300 of the respective ceiling area if the roof pitch is greater than 22°, or 1/150 of the respective ceiling area if the roof pitch is less than or equal to 22°. (c) 30% of the total unobstructed area required by (b) must be located not more than 900mm below the ridge or highest point of the roof space, measured vertically, with the remaining required area provided by eave vents.	CRA

SECTION G: ANCILLARY PROVISIONS		
PART G1 - MINOR STRUCTURES AND COMPONENTS		
G1.0: Deemed-to-Satisfy Provisions	Noted	-
G1.1: Swimming Pools	Not applicable	N/A
G1.2: Refrigerated Chambers, Strong-Rooms and Vaults	Not applicable	N/A
G1.3 Outdoor Play Spaces	Not applicable	N/A
NSW G1.101: Provision for Cleaning of Windows	Not applicable	N/A
PART G3 – ATRIUM CONSTRUCTION		
G3.1: Atriums Affected by this Part	No atriums are proposed with this development	N/A
PART G5 – CONSTRUCTION IN BUSHFIRE PRONE AREAS		
G5.0: Deemed-to-Satisfy Provisions	Noted	-
G5.1: Application of Part	Noted	-
NSW G5.2: Protection	Not applicable	N/A
PART G6 – OCCUPIABLE OUTDOOR AREAS		
G6.1: Application of Part	Noted	-
G6.2: Fire Hazzard Properties	(a) Subject to (b), a lining, material or assembly in an *occupiable outdoor area* must comply with C1.10 as for an internal element. (b) The following *fire hazard properties* of a lining, material or assembly in an *occupiable outdoor area* are not *required* to comply with C1.10: (i) *Average specific extinction area*. (ii) *Smoke-Developed Index*. (iii) *Smoke development rate*. (iv) Smoke growth rate index ($SMOGRA_{RC}$). Specific details have not been submitted; however, compliance is readily achievable. Documentation to be submitted to the satisfaction of the PCA at the CC Stage.	FI CC Stage

SECTION G: ANCILLARY PROVISIONS		
G6.3: Fire Separation	For the purposes of the Deemed-to-Satisfy Provisions of C2.7, C2.8 and C2.9, a reference to a storey includes an occupiable outdoor area, however a fire wall cannot be used to separate an occupiable outdoor area into different fire compartments.	Noted
G6.4: Provision for escape	For the purposes of the Deemed-to-Satisfy Provisions of Part D1, a reference to a storey or room includes an occupiable outdoor area.	Noted
G6.5: Construction of exits	For the purposes of the Deemed-to-Satisfy Provisions of Part D2, a reference to a storey or room includes an occupiable outdoor area.	Noted
G6.6: Fire fighting equipment	Except for Clause 7(b)(i) of Specification E1.5, for the purposes of the Deemed-to-Satisfy Provisions of Part E1, a reference to a storey includes an occupiable outdoor area	Noted
G6.7: Lift Installation	For the purposes of the Deemed-to-Satisfy Provisions of Part E3, a reference to a storey includes an occupiable outdoor area.	Noted
G6.7: Visibility in an emergency, exit signs and warning systems	For the purposes of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area.	Noted
G6.9: Light and ventilation	For the purposes of the Deemed-to-Satisfy Provisions of F4.4, F4.8 and F4.9, a reference to a room includes an occupiable outdoor area.	Noted
G6.10: Fire orders	For the purposes of the Deemed-to-Satisfy Provisions of G4.9, a reference to a storey includes an occupiable outdoor area	Noted

SECTION J: ENERGY EFFICIENCY		
PART J0 – ENERGY EFFICIENCY		
J0.1: Application of Section J	Noted	-
J0.2: Heating & Cooling Loads of SOU's to Class 2 & 4 parts	Not applicable in NSW.	Noted
J0.3: Ceiling Fans	Not applicable in NSW.	Noted
J0.4: Roof thermal breaks	Not applicable in NSW.	
J0.5: Wall thermal breaks	Not applicable in NSW.	
PART J1 – BUILDING FABRIC		
J1.0: Deemed-to-Satisfy Provisions	Noted	-
J1.1: Application of Part	Applies to the parts of the subject building forming the envelope.	CRA
J1.2: Thermal Construction General	Where required insulation is to comply with AS4859.1 and be installed in accordance with this clause.	CRA
J1.3: Roof and Ceiling Construction	The roof or ceiling that is part of the envelope is to achieve an R-value in accordance with this clause which requires R-values of between 3.2 and 4.7 dependant on location and construction, with additional insulation required where there are uninsulated areas of the ceiling or roof.	CRA
J1.4: Roof Lights	Any rooflights required to comply with this clause are to represent less than 5% of the area of the roof and are to achieve a SHGC and u-value for the rooflight system in accordance with this clause.	CRA
J1.5: Walls	The walls that are part of the envelope are to achieve an R-value in accordance with this clause that requires R-values of between 1.4 and 3.3 dependant on location and construction.	CRA
J1.6: Floors	The floors that are part of the envelope are to achieve an R-value in accordance with this clause that requires R-values of between 0 and 2.75 dependant on location and construction.	CRA
PART J2 – GLAZING		
J2.0: Deemed-to-Satisfy Provisions	Noted	-
J2.1: Application of Part	This part applies to all glazing located in the envelope of the building.	CRA
J2.4: Glazing	Glazing to comply with this clause, it is noted that this assessment does not include an assessment with the glazing calculator.	CRA
J2.5: Shading	Shading is to be considered as per this clause.	CRA
PART J3 – BUILDING SEALING		
J3.0: Deemed-to-Satisfy Provisions	Noted	-
J3.1: Application of Part	This part applies to all glazing located in the envelope of the building.	CRA
J3.2: Chimneys and Flues	Chimneys and flues where provided are to comply with this clause in that they are to be provided with a damper or flap that can be closed to seal the chimney or flue.	CRA

SECTION J: ENERGY EFFICIENCY		
J3.3: Roof Lights	Roof lights where provided are to be sealed or capable of being sealed in accordance with this clause.	CRA
J3.4: External Windows and Doors	External windows and doors are to be sealed in accordance with this clause.	CRA
J3.5: Exhaust Fans	The exhaust fans to the sanitary facilities in this portion of the building, and any other miscellaneous exhaust fans to other conditioned spaces, are to pre-fitted with a sealing device, such as a self-closing damper of the like.	CRA
J3.6: Construction of Roofs, Walls and Floors	The roof, walls, floors and any other openings, such as window or doors, are to be constructed to minimise air leakage by being enclosed by internal lining systems that are close fitting at ceiling, wall and floor junctions or are sealed by caulking, skirting, architraves, cornices or the like.	CRA
J3.7: Evaporative Coolers	Where provided an evaporative cooler is to be fitted with a self-closing damper in accordance with this clause.	CRA
PART J4 – AIR MOVEMENT		
Deleted	Part J4 deleted in BCA 2016	-
PART J5 – AIR-CONDITION AND VENTILATION SYSTEMS		
J5.0: Deemed-to-Satisfy Provisions	Noted	-
J5.2: Air-conditioning and Ventilation Systems	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.3: Mechanical ventilation system control	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.4: Fan systems	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.5: Ductwork insulation	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.6: Ductwork sealing	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.7: Pump Systems	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.8: Pipework Insulation	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.9: Space heating	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.10: Refrigerant chilling	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.11: Unitary air-conditioning equipment	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.12: Heat rejection equipment	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
PART J6 – ARTIFICIAL LIGHTING AND POWER		
J6.0: Deemed-to-Satisfy Provisions	Noted	-
J6.1: Application of Part	Applies to all buildings except a Class 8 electricity network substation.	CRA
J6.2: Artificial Lighting	Artificial lighting to comply with this clause, design certification to be provided by the electrical designer.	CRA
J6.3: Interior Artificial Lighting and Power Control	Lighting controls are to be in accordance with this clause, which sets requirements on location of switching and sets limits on floor areas controlled by a switch.	CRA
J6.4: Interior Decorative and Display Lighting	Lighting falling under this clause is to be separately switched from other lighting, be under a manual switch and controlled with a time switch.	CRA
J6.5: Artificial Lighting Around the Perimeter of a Building	Perimeter lighting is to be controlled by a daylight sensor or time switch and where it exceeds 100W have an average light source density of 60 Lumens/W or be controlled by a motion sensor complying with Specification J6.	CRA
J6.6: Boiling Water and Chilled Water Storage Units	The power supply to a fixed boiling water or chilled water storage unit must be controlled by a time switch in accordance with Specification J6.	CRA
J6.7: Lifts	Compliance required, design certification to be provided by Lift contractor.	CRA
PART J7 – HEATED WATER SUPPLY		
J7.0: Deemed-to-Satisfy Provisions	Noted	-
J7.2: Heated Water Supply	The hot water supply systems must be designed and installed in accordance with Section 8 of AS3500.4.	CRA

SECTION J: ENERGY EFFICIENCY		
J7.3: Swimming Pool Heating and Pumping	Not applicable	N/A
J7.4: Spa Pool Heating and Pumping	Not applicable	N/A
PART J8 – ACCESS FOR MAINTENANCE AND FACILITIES FOR MONITORING		
J8.0: Deemed-to-Satisfy Provisions	Noted	-
J8.1: Application of Part	Applies to all buildings except within a SOU of a Class 2 or 4 building and a Class 8 electricity network substation.	CRA
J8.2: -	Deleted by BCA 2015	-
J8.3: Facilities for Energy Monitoring	A building with a floor area of more than 500m^2 must have an energy monitoring facility to record the consumption of gas and electricity. A building with a floor area of more than 2500m^2 must have the facility to individually record the consumption of air conditioning plant, artificial lighting, appliance power, central hot water supply, lifts, escalators and other ancillary plant.	CRA
SECTION J: ENERGY EFFICIENCY (Class 2 Building & Class 4 parts)		
NSW PART J(A)1 – BUILDING FABRIC		
NSW J(A)1.0: Deemed-to-Satisfy Provisions	-	Note
NSW J(A)1.1: Application of Part	Applies to the new Class 2 buildings where thermal insulation is required as a DA Condition.	CRA
NSW J(A)1.2: Compliance with BCA Provisions	To be included in the specification to AS/NZS4859.1 and Clause J1.2, for the new portion of the building. The installation is to be certified by an appropriate consultant.	CRA
NSW PART J(A)2 – BUILDING SEALING		
NSW J(A)2.0: Deemed-to-Satisfy Provisions	Noted	Note
NSW J(A)2.1: Application of Part	Noted	Note
NSW J(A)2.2: Compliance with BCA Provisions	Compliance is to be achieved with Clauses J3.2, J3.4, J3.5 and J3.6.	CRA
J3.3: Roof Lights	Rooflights are required to comply with this sealed or capable of being sealed in accordance with this clause.	CRA
J3.4: External Windows and Doors	The windows and doors must be sealed, or the windows may comply with AS2047, doors are still to be sealed.	CRA
J3.5: Exhaust Fans	The exhaust fans to the sanitary facilities in this portion of the building, and any other miscellaneous exhaust fans to other conditioned spaces, are to pre-fitted with a sealing device, such as a self-closing damper of the like.	CRA
J3.6: Construction of Roofs, Walls and Floors	The roof, walls, floors and any other openings, such as window or doors, are to be constructed to minimise air leakage by being enclosed by internal lining systems that are close fitting at ceiling, wall and floor junctions or are sealed by caulking, skirting, architraves, cornices or the like.	CRA
NSW PART J(A)3 – AIR-CONDITIONING AND VENTILATING SYSTEMS		
NSW J(A)3.1: Application of Part	Noted	Note
NSW J(A)3.2: Compliance with BCA Provisions	Compliance is to be achieved with Clauses J5.2, J5.3, J5.4 and J5.5.	CRA
J5.2: Air-conditioning and Ventilation Systems	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.3: Time Switch	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.4: Heating and Chilling Systems	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
J5.5: Miscellaneous Exhaust Systems	Compliance required, design certification to be provided by Mechanical Engineer.	CRA
NSW PART J(A)4 – HOT WATER SUPPLY		
NSW J(A)4.0: Deemed-to-Satisfy	Noted	-
NSW J(A)4.1: Application of Part	Noted	-
NSW J(A)4.2: Compliance with BCA	The hot water supply system must comply with Clause J7.2.	CRA
J7.2: Hot Water Supply	The hot water supply systems must be designed and installed in accordance with Section 8 of AS3500.4.	CRA
NSW PART J(A)5 – ACCESS FOR MAINTENANCE		
NSW J(A)5.2: Access for Maintenance	Deleted by BCA 2016	-
NSW J(A)5.3: Compliance with BCA provisions	Class 2 Buildings must comply with national BCA provisions J8.2 and J8.3.	CRA