

# BUILDING CODE OF AUSTRALIA COMPLIANCE ASSESSMENT REPORT

Three storey commercial building with two storey basement carpark

21 Canterbury Road, Punchbowl

DATE ► 11/12/2019

REPORT NO. ► PROJECT 9633 - Rev 2.0

PREPARED FOR ► CMT Architects

PREPARED BY ► AE&D



**AEDGROUP**

Innovation & expertise in building regulations



## CONTENTS

<b>1.0</b>	<b>EXECUTIVE SUMMARY AND RECOMMENDATIONS .....</b>	<b>3</b>
1.1	RECOMMENDATIONS .....	3
<b>2.0</b>	<b>INTRODUCTION .....</b>	<b>18</b>
2.1	BASIS OF REPORT .....	18
2.2	PURPOSE OF THE REPORT.....	18
2.3	LIMITATIONS OF THE REPORT.....	18
<b>3.0</b>	<b>BCA ASSESSMENT DATA .....</b>	<b>20</b>
3.1	LOCATION OF FIRE SOURCE FEATURES .....	20
<b>4.0</b>	<b>BCA ASSESSMENT SUMMARY .....</b>	<b>21</b>
<b>5.0</b>	<b>CONCLUSION .....</b>	<b>103</b>
<b>6.0</b>	<b>ATTACHMENT A - INSPECTION &amp; MAINTENANCE .....</b>	<b>104</b>
6.1	FIRE SAFETY MEASURES.....	104
6.2	GOOD HOUSEKEEPING .....	104
<b>7.0</b>	<b>ATTACHMENT B – REQUIREMENTS TYPE A CONSTRUCTION .....</b>	<b>105</b>

### REVISION STATUS

REVISION	DATE	STATUS	WRITTEN	CHECKED
9633 - Rev 1.0	14.11.19	DRAFT FOR COMMENT	BM	DK
9633 - Rev 2.0	11.12.19	FINAL	BM	DK

#### COMMERCIAL IN CONFIDENCE

This document contains confidential material that is intended solely for the client commissioning AE&D to prepare this report. The client, project team and all regulatory authorities shall exercise precautionary measures to ensure that the information contained herein is not to be accessed by any third party. AE&D will take no responsibility for the use of any information contained within this report by any third party, unless AE&D's permission is requested and provided in writing.




## 1.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS

This report provides a Building Code of Australia (BCA) 2019 assessment of three storey commercial and retail building including Club Punchbowl and two storey basement carpark, to be located at 21 Canterbury Road, Punchbowl

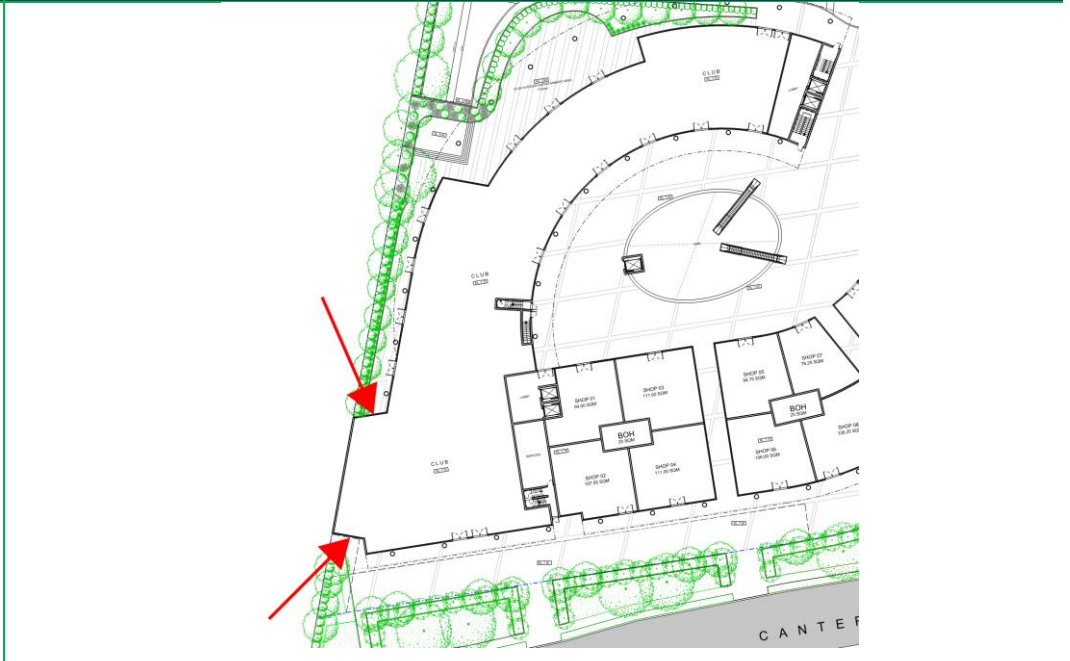
The primary purpose of this report is to identify the non-compliance matters contained in the proposed design against the current Deemed-to-Satisfy (DTS) Provisions of the BCA and to provide compliance recommendations to overcome the DTS non-compliances.

### 1.1 Recommendations

The following is a list of Deemed-to-Satisfy Provisions that should be addressed either by design amendments, additional information **OR** by way of an Alternative Solution:

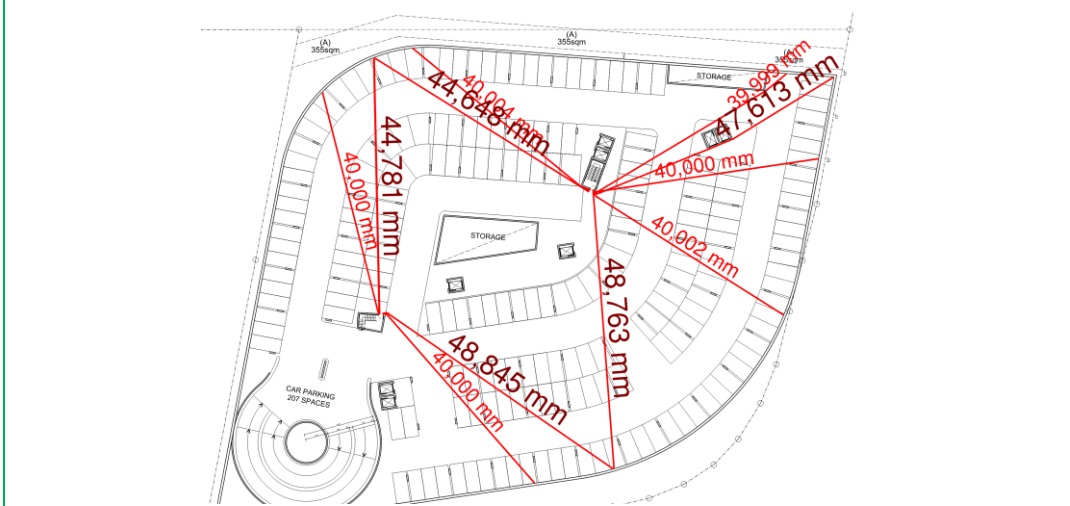
BCA Clause	Deemed-to-Satisfy Provision to be addressed
<p>C2.3 Large Isolated Buildings</p>	<p><b>The building is considered a large isolated building and therefore required to be provided with:</b></p> <ul style="list-style-type: none"> <li>• a sprinkler system complying with Spec E1.5; and</li> <li>• perimeter vehicle access is not compliant with C2.4.</li> </ul>
<p>C2.4 Requirements for Open Space and vehicular access</p>	<p><b>Perimeter vehicular access around the entire building is not provided and therefore does not comply.</b></p> <p><i>It is recommended that a Fire Engineered be engaged at this stage to determine if a Performance Solution is possible.</i></p> 
<p>C3.2 Protection of openings in external walls</p>	<p><b>The windows located within 3m of the side boundary on Ground Level, Level 1 &amp; 2 are required to be protected in accordance with Clause C3.4.</b></p>

BCA Clause	Deemed-to-Satisfy Provision to be addressed
------------	---



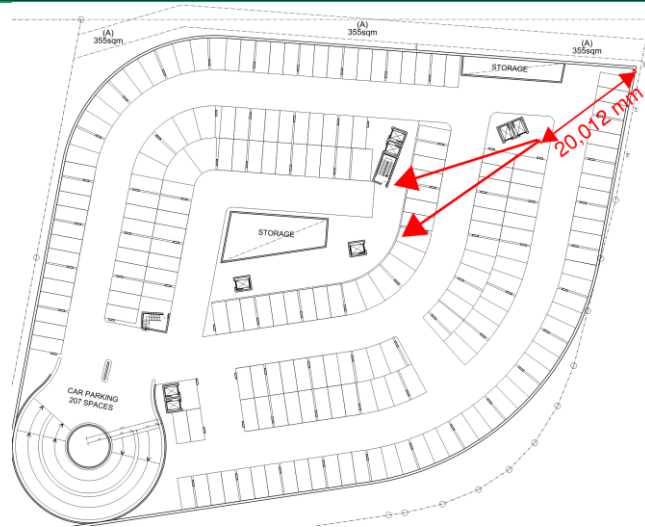
D1.4  
Exit Travel Distances

**Basement 2 - The exit travel distance is greater than 40m, maximum being 48.8m.**



**Basement 2 – The distance to a point of choice from the north eastern corner after 20m is not in “different directions”, and therefore does not comply. Refer to the marked up plan detailing the distance to a point of choice after 20m.**

BCA Clause	Deemed-to-Satisfy Provision to be addressed
------------	---

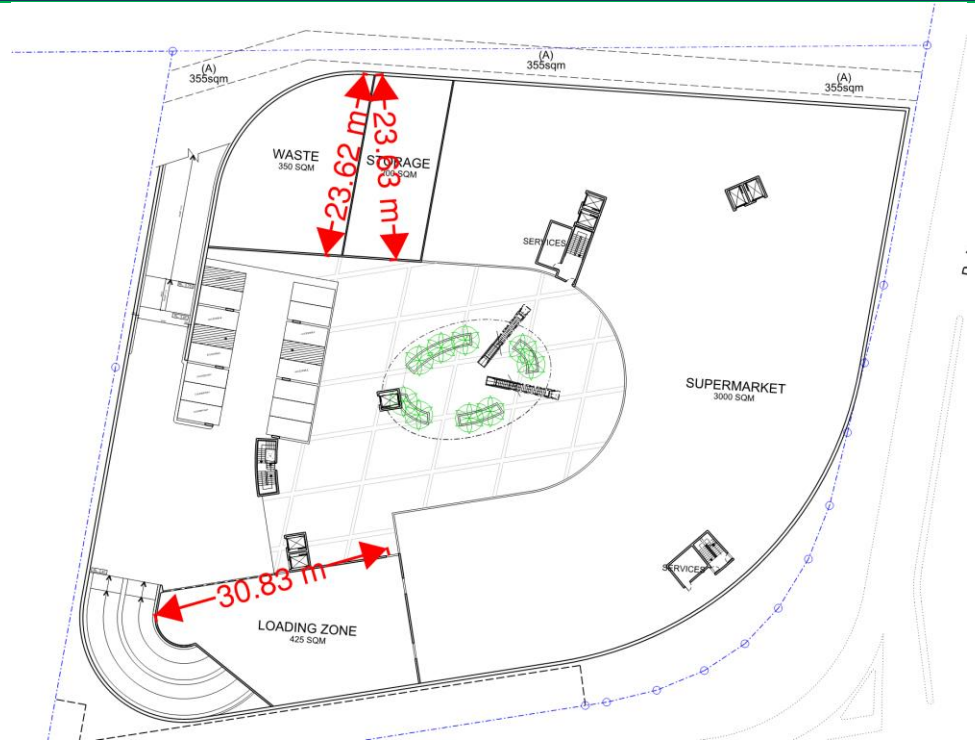


**Basement 1 - The exit travel distance is greater than 40m, maximum being 51.4m. The travel distance will be greatly increase upon fitout of the supermarket.**

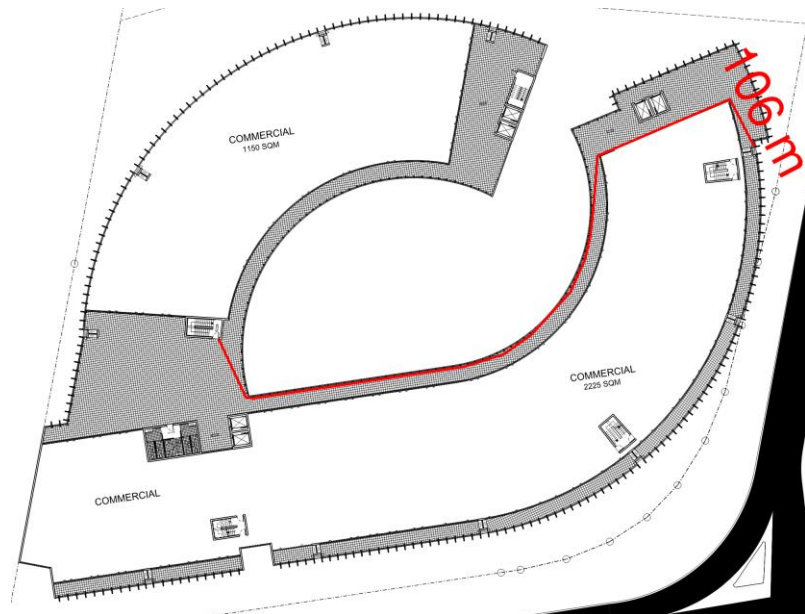


**Basement 1 – The distance to a point of choice from the “Waste”, Storage” and “Loading Zone” is greater than 20m, maximum being 30.83m. Refer to the marked-up plan detailing the distance to a point of choice after 20m.**

BCA Clause	Deemed-to-Satisfy Provision to be addressed
------------	---



**Level 1 & 2 – The distance to a point of choice from the north eastern corner is greater than 20m, being 106m.**  
**Please note D1.2 requires access to exits must not pass through another SOU.**  
**An additional exit will be required.**



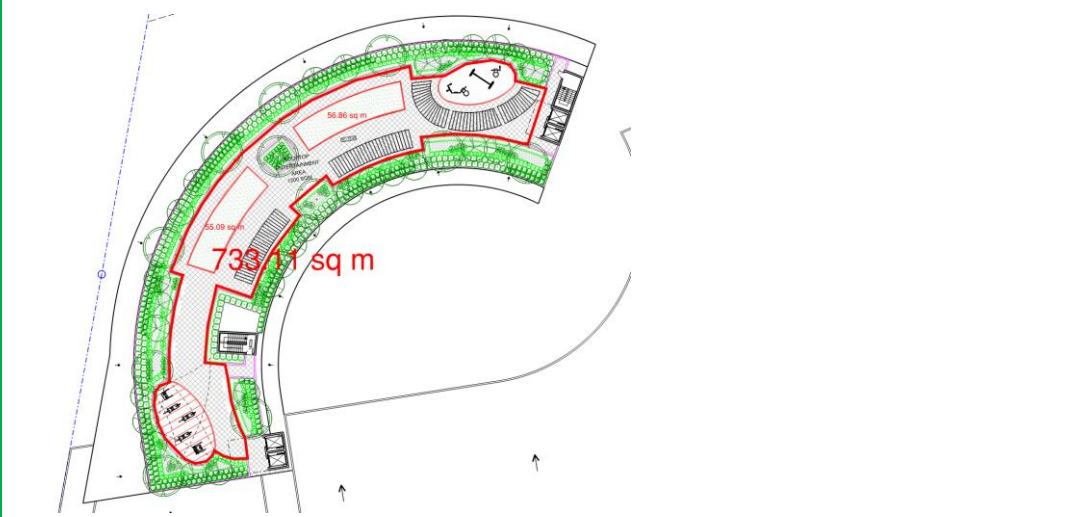
<p>D1.5 Distance Between Alternative Exits</p>	<p><b>Roof - Exits that are required as alternative means of egress is greater than 60m, being 72.58m.</b></p>
--	--

BCA Clause	Deemed-to-Satisfy Provision to be addressed
------------	---



D1.6  
Dimensions of Exits and paths of Travel to Exits

**Rooftop – The architect is required to nominate the proposed population of the “Rooftop Entertainment Area”.**  
**Under BCA Clause D1.13 a “public hall” (closest use in D1.13) details that 1m<sup>2</sup> per person. Therefore, the population of the “Rooftop Entertainment Area” would be 622 people.**



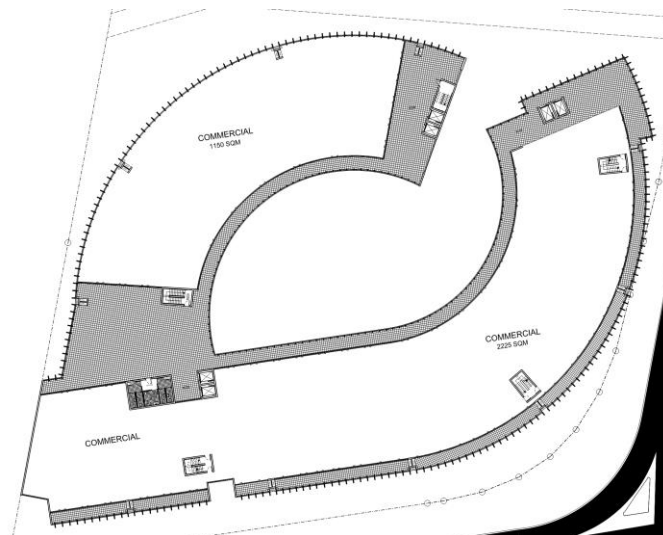
**Based on the population of 622 people the required aggregate width is 6m.**  
**The aggregate width of the proposed stairway is 2m.**

**BCA Clause**
**Deemed-to-Satisfy Provision to be addressed**


Level 2 & 1 - Under BCA Clause D1.13 a “office” (closest use in D1.13) details that 10m<sup>2</sup> per person. Therefore, the population of the “Commercial” would be 223 (south) & 115 people (north).

South - Based on the population of 225 people the required aggregate width is 2.5m. The aggregate width of the proposed stairway is 3m Part complies.

North - Based on the population of 115 people the required aggregate width is 1.25m. The aggregate width of the proposed stairway is 2m. Part complies.



Ground – Multiple exits are provided. Part complies.

**Basement 1 - Under BCA Clause D1.13 a “shop” (closest use in D1.13) details that 5m<sup>2</sup> per person. Therefore, the population of the shop would be 600 people.**

**Based on the shop population of 600 people the required aggregate width is 5.5m.**

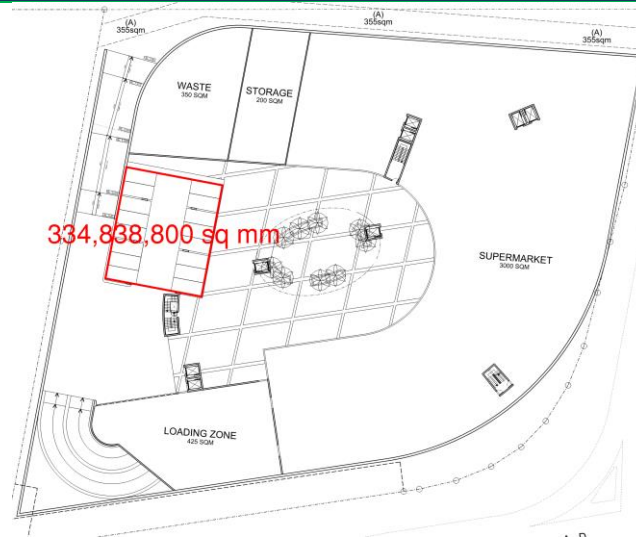
**The aggregate width of the stairways is 3m. Does not comply**

Loading zone, storage, waste and carpark - D1.13 details that 30m<sup>2</sup> per person. Therefore, the population of the shop would be 44 people.

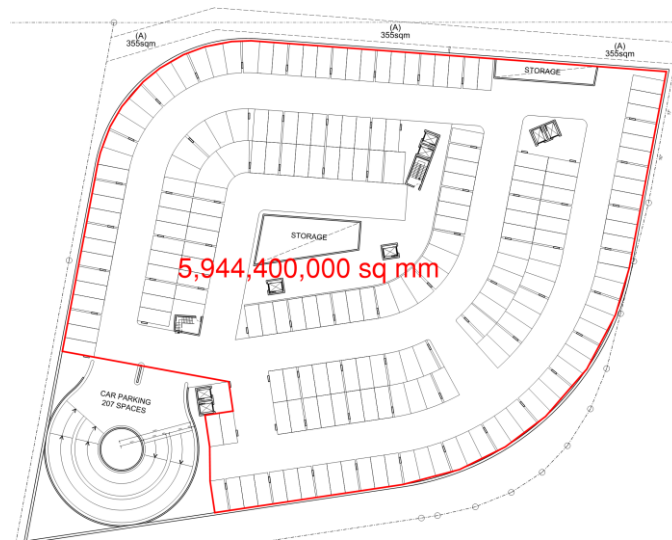
Based on the loading zone, storage, waste and carpark population of 44 people the required aggregate width is 1m.

The aggregate width of the stairways is 2m. Part complies.

BCA Clause	Deemed-to-Satisfy Provision to be addressed
------------	---



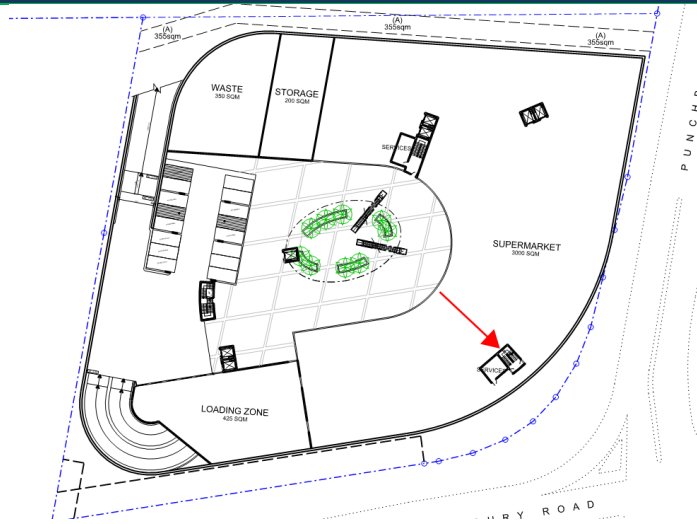
Basement 2 - Under BCA Clause D1.13 a “carpark” (closest use in D1.13) details that 30m<sup>2</sup> per person. Therefore, the population of the carpark would be 199 people.  
 Based on the carpark population of 199 people the required aggregate width is 2m.  
 The aggregate width of the stairways is 2m. Part complies.



D1.7  
 Travel via Fire Isolated  
 Stairs

**The supermarket on Basement 1 does not occupy all of the storey and therefore the FIS is not permitted to open directly into it.**

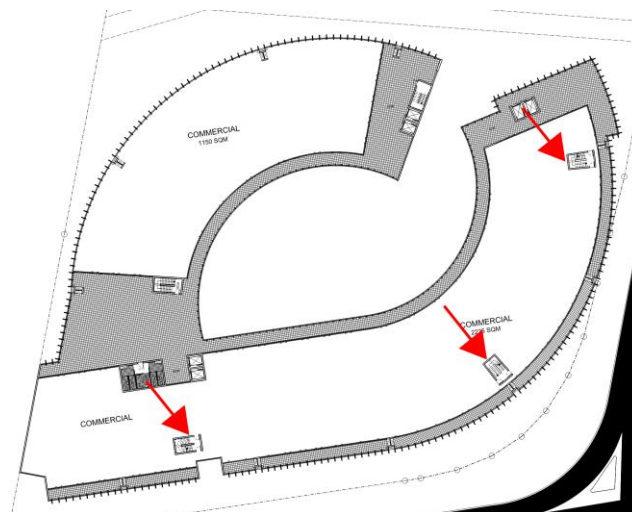
**BCA Clause** **Deemed-to-Satisfy Provision to be addressed**



**Ground Floor – An airlock is required to be provided from the “Service Room” discharging into the fire-isolated stairway.**



**The commercial tenancy on Level 1 & 2 currently occupies the whole floor and therefore complies, however, where the floor is divided in the future it will create a non-compliance where the doorways open directly open into the fire isolated stairway. This should be considered at this stage.**



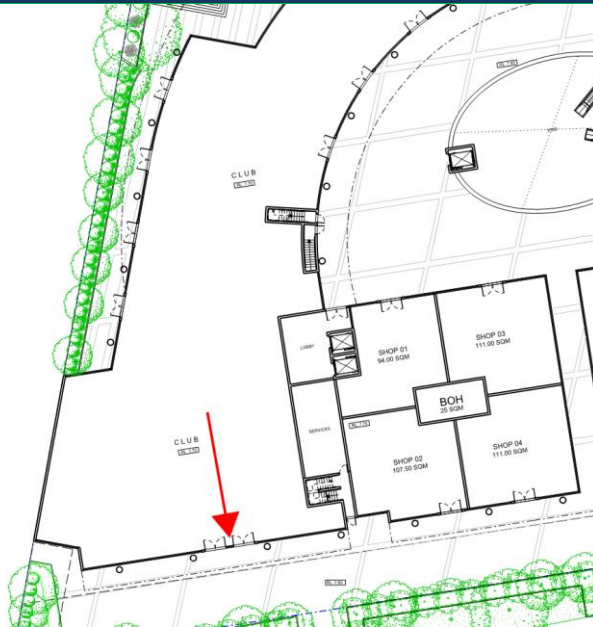
BCA Clause	Deemed-to-Satisfy Provision to be addressed
------------	---

	<p>The stairways discharging into the covered area on Ground Floor must have a height of no less than 3 m.</p>
--	--

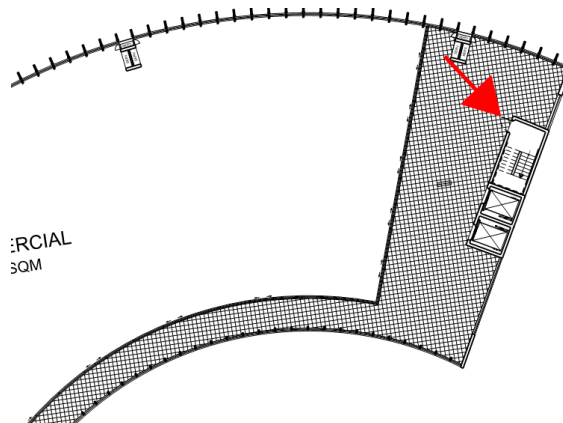
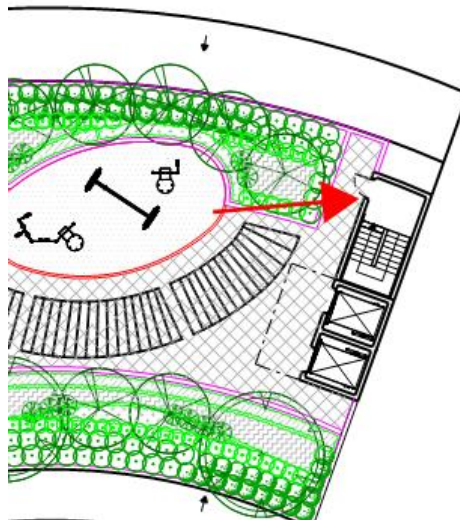
<p>D2.17 Handrails</p>	<p>The handrails within fire-isolated stairways serving areas required to be accessible (all FIS's in the subject building) are not provided with a one tread offset to comply with Figure 28 of AS 1428.1-2009.</p> <p style="text-align: center;">(a) Plan DIMENSIONS IN MILLIMETRES</p> <p style="text-align: center;">FIGURE 28 (in part) HANDRAILS TO STAIRS WITH INTERMEDIATE LANDINGS</p>
----------------------------	--

<p>D2.20 Swinging Doors</p>	<p>Ground Floor - The doorways discharging onto Canterbury Road from the Club, serving as required exits, must swing in the direction of egress.</p>
---------------------------------	--

BCA Clause	Deemed-to-Satisfy Provision to be addressed
------------	---



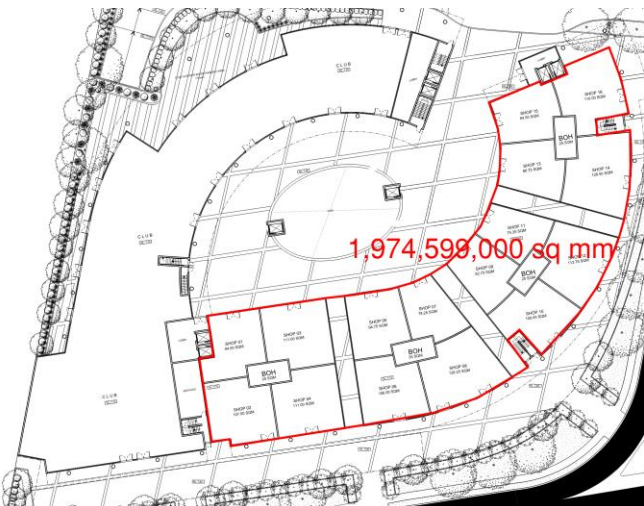
**Level 1 & 2 & Rooftop - The doorways discharging into the fire-isolated must swing in the direction of egress.**



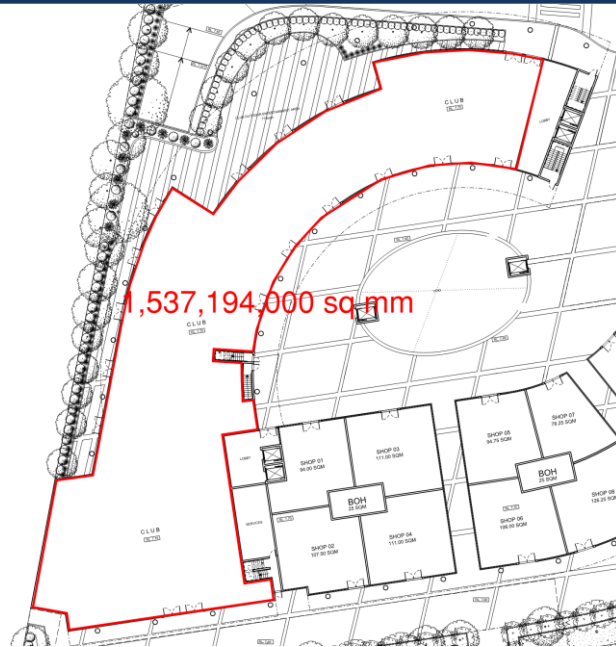


BCA Clause	Deemed-to-Satisfy Provision to be addressed
E1.3 Fire Hydrants	<p>The following details are required to be detailed on the CC plans:</p> <ol style="list-style-type: none"><li>1. Hydrant booster assembly;</li><li>2. Pump room</li></ol>
E1.4 Fire Hose Reels	<p>The following details are required to be detailed on the CC plans:</p> <ol style="list-style-type: none"><li>1. Location of the Fire hose reels throughout the building.</li></ol>
E1.5 Sprinklers	<p>The building is required to be provided with a sprinkler system to satisfy the large isolated building provision C2.3 and the Class 7a carpark accommodates more than 40 vehicles.</p> <p>The following details are required to be detailed on the CC plans:</p> <ol style="list-style-type: none"><li>1. Location of the sprinkler pump room</li><li>2. Location of the sprinkler valve enclosure.</li></ol>
E1.6 Portable Fire Extinguishers	<p>The following details are required to be detailed on the CC plans:</p> <ol style="list-style-type: none"><li>1. Location of the PFE's</li></ol>
E2.2 General Requirements (inclusive of Table E2.2a / Table E2.2b & NSW amendments)	<p><b><u>Class 5, 6, 7b &amp; 9b parts</u></b></p> <p>The building is required to be provided with a sprinkler system to satisfy the large isolated building provisions and therefore the smoke hazard management provisions are compliant.</p> <p><b><u>Large isolated building subject to C2.3</u></b></p> <p>In a Class 5, 6, 7 or 9 building, which exceeds 18 000 m<sup>2</sup> in floor area or 108 000 m<sup>3</sup> in volume, (subject building has a floor area of approximately 20,000 m<sup>2</sup> the building must be provided with—</p> <p>(i) if the ceiling height of the fire compartment is not more than 12 m—</p> <p>(A) an automatic smoke exhaust system in accordance with Specification E2.2b; or</p> <p>(B) automatic smoke-and-heat vents in accordance with Specification E2.2c; or</p> <p>(ii) if the ceiling height of the fire compartment is more than 12 m, an automatic smoke exhaust system in accordance with Specification E2.2b.</p> <p><b><u>Class 7a (carpark)</u></b></p> <p>A Class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2 must comply with clause 5.5 of AS/NZS 1668.1 except that—</p> <p>(a) fans with metal blades suitable for operation at normal temperature may be used; and</p> <p>(b) the electrical power and control cabling need not be fire rated</p> <p><b><u>Class 9b (club)</u></b></p> <p><b>Automatic shutdown:</b></p>



BCA Clause	Deemed-to-Satisfy Provision to be addressed
	<p>A building or part of a building used as an assembly building must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 l/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 11 of AS/NZS 1668.1) which does not form part of the smoke hazard management system, on the activation of—</p> <p>(i) smoke detectors installed complying with Clause 5 of Specification E2.2a; and</p> <p>(ii) any other installed fire detection and alarm system, including a sprinkler system complying with Specification E1.5.</p> <p><b>Class 6 part</b></p> <p>The provisions of Table E2.2b do not apply as the floor area is less than 2000m<sup>2</sup> and the Class 6 SOU is located opening to the road.</p> <p>The Class 6 parts must be separated from other parts of the fire compartment by construction, including openings, penetrations and junctions with other building elements, that prevents the free passage of smoke.</p> 
<p>F2.3 Facilities for Class 3 to 9 Buildings</p>	<ul style="list-style-type: none"> <li> <p><b>Basement 1 – Shopping centre</b></p> <p>Occupant Numbers = 600 people</p> <p>Table F2.3 states “Sanitary facilities need not be provided if the total number of persons accommodated in the building is not more than 600.</p> <p><b>Details on the proposed number of employees is required to assess the required number of sanitary facilities.</b></p> </li> <li> <p><b>Ground Floor – Club</b></p> <p><b>Details on the proposed number of occupants is required to assess the required number of sanitary facilities.</b></p> <p><b>Based on D1.13 Bar requires 1m<sup>2</sup> per person.</b></p> <p><b>Therefore 1,537 is the expected population. Please note this is based on the floor area of the shell and therefore the occupant numbers will be greatly reduced. The number of sanitary facilities is required to be addressed at this stage.</b></p> </li> </ul>

BCA Clause	Deemed-to-Satisfy Provision to be addressed
------------	---



- **Ground Floor – Shops.**

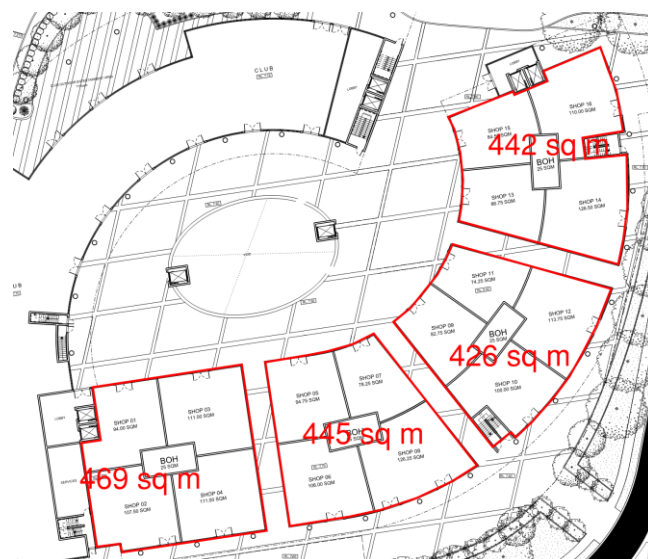
Total floor area = 1,782m<sup>2</sup>

D1.13 = 3m<sup>2</sup> per person

Occupant Numbers = 594 people

Table F2.3 states , shopping centre, “Sanitary facilities need not be provided if the total number of persons accommodated in the building is not more than 600.

**Details on the proposed number of employees is required to assess the required number of sanitary facilities.**



BCA Clause	Deemed-to-Satisfy Provision to be addressed
------------	---

- Level 1 & 2 – Commercial**

Under BCA Clause D1.13 a “office” (closest use in D1.13) details that 10m<sup>2</sup> per person. Therefore, the population of the “Commercial” would be 223 (south) & 115 people (north).

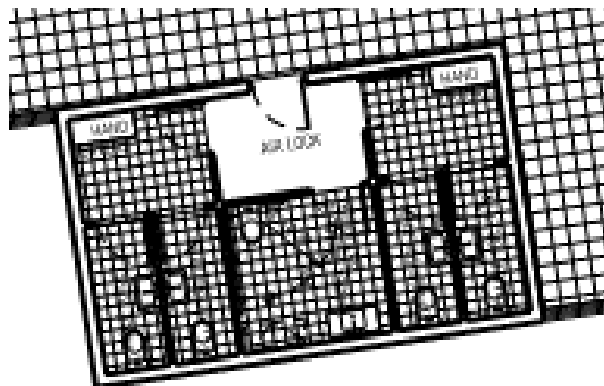
Total population = 338

Required	CP	U	WB
Male – 169	9	5	6
Female – 169	12	-	6
Unisex accessible	1		

Provided	CP	U	WB
Male – 169	2	0	2
Female – 169	2	-	2
Unisex accessible	1		

Therefore, the following additional sanitary facilities are required.

Provided	CP	U	WB
Male	7	5	4
Female	10	-	4
Unisex accessible	0		



- Rooftop – Entertainment area**

Under BCA Clause D1.13 a “public hall” (closest use in D1.13) details that 1m<sup>2</sup> per person. Therefore, the population of the “Rooftop Entertainment Area” would be 622 people.

F2.3 assessment for required sanitary compartment numbers for Class 9b – public hall, function rooms

BCA Clause	Deemed-to-Satisfy Provision to be addressed				
	<b>Required</b>	<b>CP</b>	<b>U</b>	<b>WB</b>	
	Male – 311	3	6	3	
	Female – 311	7	-	3	
	Unisex accessible	1			
	<b>Provided</b>	<b>CP</b>	<b>U</b>	<b>WB</b>	
	Male – 600	0	0	0	
	Female – 600	0	-	0	
	Unisex accessible	0			
	<p><b>Therefore, the following additional sanitary facilities are required.</b></p>				
	<b>Required</b>	<b>CP</b>	<b>U</b>	<b>WB</b>	
Male – 600	3	6	3		
Female – 600	7	-	3		
Unisex accessible	1				
F2.4 Facilities for People with Disabilities	<p><b>Accessible sanitary compartments are required in</b></p> <ul style="list-style-type: none"> <li>• 1 on every storey containing sanitary compartments and</li> <li>• Where a storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks.</li> </ul> <p><b>Once sanitary facilities are provided to satisfy BCA Clause F2.3, the accessible sanitary compartments and ambulant sanitary compartments are required to comply with AS 1428.1-2009.</b></p>				

## 2.0 INTRODUCTION

---

This report provides a Building Code of Australia (BCA) 2019 assessment of three storey commercial and retail building including Club Punchbowl and three storey basement carpark, to be located at 21 Canterbury Road, Punchbowl

This report provides a BCA assessment table in Section 3.0 that summarises the identified non-compliance matters and offers specific recommendations.

### 2.1 Basis of Report

---

The key basis of this report is to address compliance with the Building Code of Australia (BCA) 2019. The scope of services is limited to Sections C – “Fire Resistance”, Section D – “Access & Egress”, Section E – “Services & Equipment”, Section F “Health and Amenity” and Section J “Energy Efficiency”

This report is based on a desktop assessment of the proposed plans, with specific reference to the following:

- Architectural plans prepared by CMT Architects, Drawing Numbers:

Drawing Title	Drawing No.	Revision	Dated
Basement Lower – South	DA 1.98South	A	14.10.19
Basement Upper – South	DA 1.99South	A	30.07.19
Ground	DA 2.00Full	A	30.07.19
Ground - South	DA 2.00South	A	30.07.19
First - South	DA 2.01South	A	30.07.19
Second - South	DA 2.02South	A	30.07.19
Roof - South	DA 2.03South	A	30.07.19

- The Building Code of Australia 2019 prepared by the Australian Building Codes Board.
- The Guide to the BCA 2019, prepared by the Australian Building Codes Board.

### 2.2 Purpose of the Report

---

The purpose of this report is to assess the following:

- Assessment under the current Building Code of Australia 2019 and list any departures from the BCA 2019.
- Provide recommendations to address identified non-compliances, and/or identify potential alternative solutions

### 2.3 Limitations of the Report

---

This report does not assess the following:

- Access and facilities for people with disabilities is addressed however compliance with Disability Discrimination Act 1992 (DDA) is outside the scope of this report. It should be noted that BCA compliance does not necessarily meet the requirements of the Disability Discrimination Act (DDA).
- Reporting on hazardous materials, OH&S matters or site contamination
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire resistant levels of the building
- Consideration of any fire services operations (including hydraulic, electrical or other systems)
- Assessment of plumbing and drainage installations, including stormwater
- Assessment of mechanical plant operations, electrical systems or security systems
- Heritage significance



- Consideration of energy or water authority requirements
- Consideration of Council's local planning policies
- Environmental or planning issues
- Requirements of statutory authorities
- Pest inspection or assessment building damage caused by pests (general/visual pest invasion or damage will be reported, however invasive or intrusive inspections have not be carried out)
- Sections G, H or I of the BCA are not considered.
- Provision of any construction approvals or certification under Part 4A or Part 5 of the Environmental Planning & Assessment Act 1979.
- Glazing, shading, lighting calculations and the like required by Section J of the BCA not been carried out
- BCA 2019 does not directly specify slip-resistance classification(s) for all *accessible paths of travel*; however, we highlight the need under AS 1428.1-2009 for all *accessible paths of travel* to have a slip-resistant surface. We recommend you should seek surface finish advice from an independent specialist slip safety consultant.



### 3.0 BCA ASSESSMENT DATA

The following data is provided in respect to review of the building under the Building Code of Australia 2019 in respect to the compliance assessment of the four storey commercial and retail building including Club Punchbowl and three storey basement carpark, to be located at 21 Canterbury Road, Punchbowl.

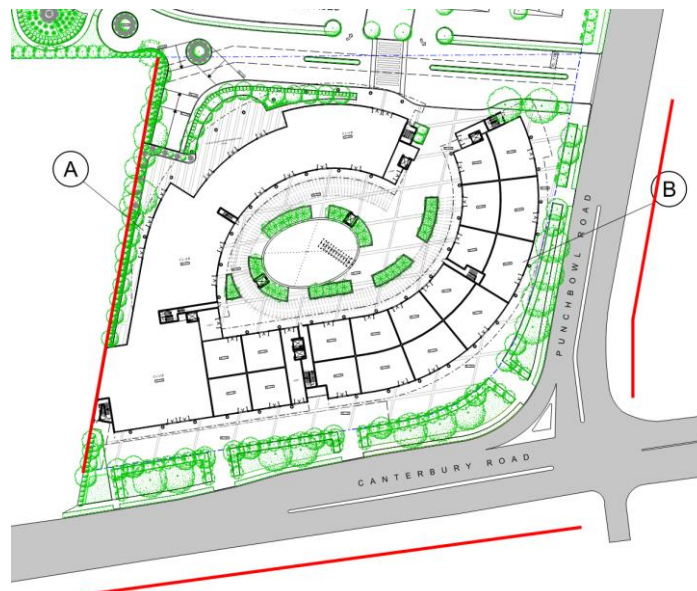
BCA Building Classifications:	Basement 2: Class 7a - carpark Basement 1: Class 6 – supermarket Class 7a - carpark Ground Floor: Class 9b – club Class 6 – retail First Floor: Class 5 – commercial Second Floor: Class 5 – commercial
Building rise in storeys:	3 (determined in accordance with C1.2 of the BCA).
Type of Construction:	A (determined in accordance with C1.1 of the BCA)
General Floor area limitations:	Exceeds 5,000m <sup>2</sup>
Effective Height (m):	Unknown
Climate Zone (Thermal Design)	5 (determined in accordance with ABCB Climate map, Rev VC00031.3, dated Sep 2019)

### 3.1 Location of Fire Source features

The potential *fire source features* to be considered for this building are the external wall of another building on the allotment which is not a Class 10 building, the side or rear of the allotment boundary or the far side of the road.

In this instance the following setbacks are determined in respect to the fire source features applicable to the building

- North – >6m to any building
- South – >6m to the far side of Canterbury Road
- East – <3m to the eastern boundary
- West – >6m to the far side of Punchbowl Road





## 4.0 BCA ASSESSMENT SUMMARY

The following table details the BCA compliance of the assessed design.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
<b>SPECIFICATION A1.1 FIRE PROTECTED TIMBER</b>					
Specification A1.1 has been introduced to allow fire-protective timber construction utilising a non-combustible fire protective covering for buildings not exceeding 25m which are sprinkler protected.					
2.1 General requirements			X		Not applicable. No expected to be constructed of fire protected timber
2.2 Massive Timber			X		Not applicable. No expected to be constructed of fire protected timber
<b>SECTION B STRUCTURE</b>					
<b>Part B1: Structural Provisions</b>				X	<ul style="list-style-type: none"> <li>❖ Structural engineer to provide structural drawings/details and accompanying structural design certificate to demonstrate that all building elements will comply with Section B of the BCA.</li> <li>❖ Glazing must comply with AS1288-2006 and AS2047-2014.</li> <li>❖ Termite control must comply with AS3660.1-2000 where any primary building elements are timber.</li> <li>❖ If the building is in a flood hazard area it is required to comply with BCA clause B1.6.</li> </ul> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification (and structural details)</i></b></p>
<b>SECTION C FIRE RESISTANCE</b>					
<b>Part C1 - Fire Resistance &amp; Stability</b>					
C1.1 Type of Construction Required				X	<p>Refer to Spec C1.1 and Attachment B for Schedule of FRLs for Type A Construction. These are to be certified by the architect and structural engineer as having been met, based on the proposed design.</p> <p>Please note that specification C1.1 also requires design compliance with the following:</p> <ol style="list-style-type: none"> <li>1. Where a combustible material is used as a finish or lining to a wall or roof, or sunscreen, or awning, to a building element required to have an FRL the material must be exempted or comply with the fire hazard properties prescribed under C1.10 and must not otherwise constitute an undue risk of fire spread via the façade of the building or compromise egress from the building. This includes any aluminum panels which where containing</li> </ol>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>plastic strengthening elements would not be non-combustible.</p> <ol style="list-style-type: none"> <li>2. Fire isolated shafts are required to be enclosed at the top and bottom of the shaft with fire rated construction as per specification C1.1. This fire rating is required in two directions.</li> <li>3. External walls, common walls and the flooring and floor framing of lift pits must be non-combustible construction.</li> <li>4. Internal lightweight walls to be fire rated, as well as non-load bearing lift, ventilating, pipe, garbage or similar shaft wall must be of non-combustible construction.</li> <li>5. The walls to fire rated shafts must achieve the fire rating from both directions i.e. from inside and outside the shaft.</li> <li>6. Roof: The roof of the building is required to achieve an FRL of 120/60/30 to comply with Table 3 of Spec C1.1</li> <li>7. Floors: see clause C2.9.</li> </ol> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification (and structural details)</i></b></p>
C1.2 Calculation of Rise In Storeys			X		Refer to Section 2.0 of this report for further details
C1.3 Buildings of Multiple Classifications			X		The building will be Type A construction.
C1.4 Mixed Types of Construction			X		The building will be Type A construction only.
C1.5 Two Storey Class 2, 3 or 9c buildings			X		Not applicable. Not a Class 2, 3 or 9c building.
C1.6 Class 4 Parts			X		Not applicable. No Class 4 parts.
C1.7 Open Spectator Stands			X		Not applicable. No open spectator stands.
C1.8 Lightweight Construction			X		<p>Where it is proposed to use <i>lightweight construction</i> (within the meaning of the BCA) this must comply with Specification C1.8 if it is used in a wall system—</p> <ol style="list-style-type: none"> <li>(i) that is required to have an FRL; or</li> <li>(ii) for a lift shaft, stair shaft or service shaft or an external wall bounding a public corridor including a non fire-isolated passageway or non fire-isolated ramp.</li> </ol>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>If lightweight construction is used for the fire-resisting covering of a steel column or the like, and if —</p> <ul style="list-style-type: none"> <li>(i) the covering is not in continuous contact with the column, then the void must be filled solid, to a height of not less than 1.2 m above the floor to prevent indenting; and</li> <li>(ii) the column is liable to be damaged from the movement of vehicles, materials or equipment, then the covering must be protected by steel or other suitable material.</li> </ul> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<p>C1.9 Non - combustible building elements</p>			X		<ul style="list-style-type: none"> <li>(a) In a building <i>required</i> to be of Type A construction, the following building elements and their components must be <i>non-combustible</i>: <ul style="list-style-type: none"> <li>(i) <i>External walls</i> and <i>common walls</i>, including all components incorporated in them including the facade covering, framing and insulation.</li> <li>(ii) The flooring and floor framing of lift pits.</li> <li>(iii) <i>Non-loadbearing internal walls</i> where they are <i>required</i> to be <i>fire-resisting</i>.</li> </ul> </li> <li>(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— <ul style="list-style-type: none"> <li>(i) a building <i>required</i> to be of Type A construction;</li> </ul> </li> <li>(c) A <i>loadbearing internal wall</i> and a <i>loadbearing fire wall</i>, including those that are part of a <i>loadbearing shaft</i>, must comply with <b>Specification C1.1</b>.</li> <li>(d) The requirements of (a) and (b) do not apply to gaskets, caulking, sealants, termite management systems, glass including laminated glass, thermal breaks associated with glazing systems, damp-proof courses.</li> <li>(e) The following materials may be used wherever a <i>non-combustible</i> material is <i>required</i>: <ul style="list-style-type: none"> <li>(i) Plasterboard.</li> <li>(ii) Perforated gypsum lath with a normal paper finish.</li> <li>(iii) Fibrous-plaster sheet.</li> <li>(iv) Fibre-reinforced cement sheeting.</li> <li>(v) Pre-finished metal sheeting having a <i>combustible</i> surface finish not exceeding 1 mm thickness and where the <i>Spread-of-</i></li> </ul> </li> </ul>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p><i>Flame Index</i> of the product is not greater than 0.</p> <p>(vi) Sarking type materials that do not exceed 1mm in thickness and have a Flammability Index not greater than 5.</p> <p>(vii) Bonded laminated materials where—</p> <p>(A) each lamina, including any core, is <i>non-combustible</i>; and</p> <p>(B) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2mm; and</p> <p>(C) the <i>Spread-of-Flame Index</i> and the <i>Smoke-Developed Index</i> of the bonded laminated material as a whole do not exceed 0 and 3 respectively.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
C1.10 Fire Hazard Properties				X	<p>(a) The fire hazard properties of the following internal linings, materials and assemblies must comply with Specification C1.10 by way of test reports / certificates provided from a <i>registered testing authority</i> (within the meaning of the BCA):</p> <p>(i) Floor linings and floor coverings.</p> <p>(ii) Wall linings and ceiling linings.</p> <p>(iii) Air-handling ductwork.</p> <p>(iv) Lift cars.</p> <p>(v) NSW C1.10(a)(v) -In a Class 9b building used as an entertainment venue , a material used to cover closed back upholstered seats; and a public hall or the like a proscenium curtain required by Specification H1.3.</p> <p>(vi) Escalators, moving walkways and non required non fire isolated stairways or pedestrian ramps subject to Specification D1.12.</p> <p>(vii) Sarking type materials.</p> <p>(viii) Attachments to floors, ceilings, internal walls and the internal linings of external walls.</p> <p>(ix) Other materials including insulation materials other than sarking type materials.</p> <p>(a) NSW: Paint or fire -retardant coatings must not be used in order to make a material comply with the required fire hazard property, except in respect to a material referred to in NSW Specifications</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>C1.10, NSW Table 4 and to which Notes 4 and 5 are applicable.</p> <p>(b) The requirements of (a) do not apply to a material or assembly if it is –</p> <ul style="list-style-type: none"> <li>(i) plaster, cement render, concrete, terrazzo, ceramic tile or the like; or</li> <li>(ii) a fire protective covering; or</li> <li>(iii) a timber framed window; or</li> <li>(iv) a solid timber handrail or skirting; or</li> <li>(v) a timber-faced door; or</li> <li>(vi) an electrical switch, socket-outlet, cover plate or the like; or</li> <li>(vii) a material used – <ul style="list-style-type: none"> <li>(A) a roof insulating material applied in continuous contact with a substrate; or</li> <li>(B) an adhesive; or</li> <li>(C) a damp-proof course, flashing, caulking, sealing, ground moisture barrier or the like; or</li> </ul> </li> <li>(viii) a paint, varnish, lacquer or similar finish, other than nitro-cellulose lacquer; or</li> <li>(ix) a clear or translucent roof light of glass fibre-reinforced polyester if – <ul style="list-style-type: none"> <li>(A) the roof in which is installed forms part of a single storey building required to be Type C construction; and</li> <li>(B) the material is used as part of the roof covering; and</li> <li>(C) it is no closer than 1.5m from another roof light of the same type; and</li> <li>(D) each roof light is not more than 14m<sup>2</sup> in area; and</li> <li>(E) the area of the roof lights per 70m<sup>2</sup> of roof surface is not more than 14m<sup>2</sup> in area; or</li> </ul> </li> <li>(x) a face plate or neck adaptor of supply and return air outlets of an air handling system; or</li> <li>(xi) a face plate or diffuser plate of light fitting and emergency exit signs and associated electrical wiring and electrical components; or</li> <li>(xii) a joinery unit, cupboard, shelving or the like; or</li> <li>(xiii) NSW: an attached non-building fixture and fitting such as –</li> </ul>





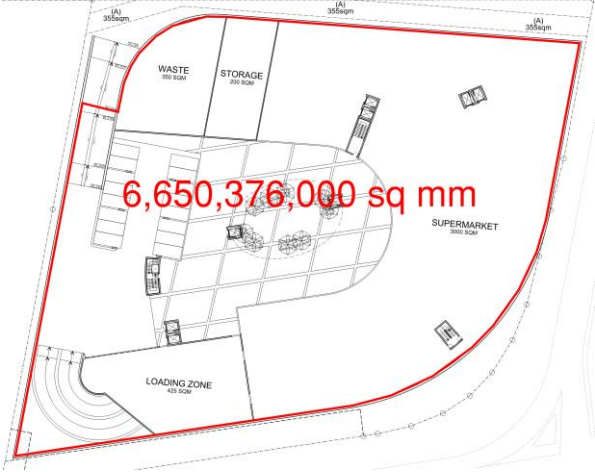
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(A) A curtain, blind, or similar décor, other than-</p> <p>(bb) a proscenium curtain required by Specification H1.3; or.</p> <p>(cc) in a Class 9b building used as an entertainment venue, a material that is regulated under NSW Table 4; and</p> <p>(B) A whiteboard, window treatment or the like; or</p> <p>(xiv) Timber treads, risers, landings and associated supporting framework installed in accordance with D2.25 where the Spread-of-Flame Index and the Smoke-Developed Index of the timber does not exceed 9 and respectively; or</p> <p>(xv) Any other material that does not significantly increase the hazards of the fire.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
C1.11 Performance of External Walls in Fire			X		Concrete external walls that could collapse as complete panels (e.g. tilt-up and pre-cast concrete), in a building having a rise in storeys of not more than 2, must comply with Specification C1.11.
C1.12 ****			X		Clause deleted.
C1.13 Fire protected timber: concession			X		Not applicable. Not expected to be construction of fire-protected timber.
C1.14 Ancillary elements			X		<p>An <i>ancillary element</i> must not be fixed, installed or attached to the internal parts or external face of an <i>external wall</i> that is <i>required</i> to be <i>non-combustible</i> unless it is one of the following:</p> <p>(a) An ancillary element that is non-combustible.</p> <p>(b) A gutter, downpipe or other plumbing fixture or fitting.</p> <p>(c) A flashing.</p> <p>(d) A grate or grill not more than 2m<sup>2</sup> in an area associated with a building service.</p> <p>(e) An electrical switch, socket outlet, cover plate or the like.</p> <p>(f) A light fitting.</p> <p>(g) A <i>required</i> sign.</p> <p>(h) A sign other than one provided under (a) or (g) that –</p> <p>(1) Achieves a group number 1 or 2; and</p>

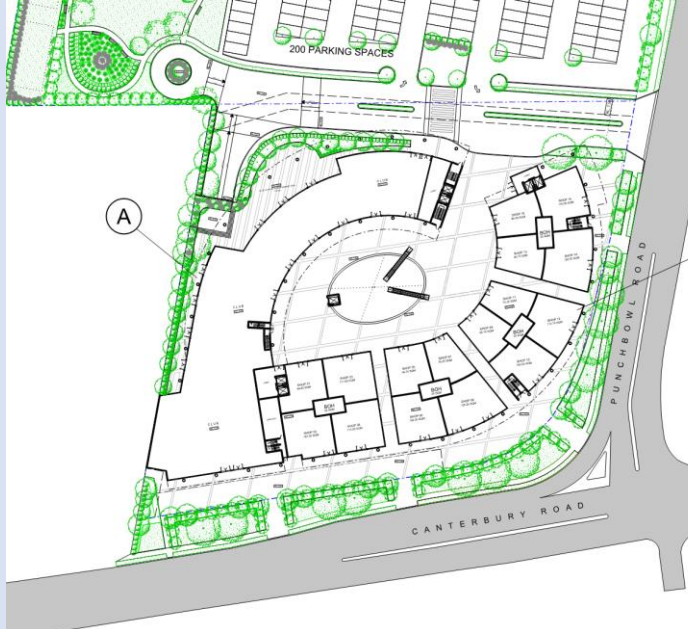




BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					<p>(2) Does not extend beyond one storey; and</p> <p>(3) Does not extend beyond one fire compartment; and</p> <p>(4) Is separated vertically from other signs permitted under (h) by at least 2 storeys.</p> <p>(i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that –</p> <p>(1) Meets the requirements of Table 4 of Specification C1.10 as an internal element; and</p> <p>(2) Serves a storey -</p> <p>(A) At ground level; or</p> <p>(B) Immediately above a storey at ground level ; and</p> <p>(3) Does not serve an exit, where it would render the exit unusable in a fire.</p> <p>(j) A part of a security, intercom or announcement system.</p> <p>(k) Wiring.</p> <p>(l) A paint, lacquer or similar finish,</p> <p>(m) A gasket, caulking, sealant or adhesive directly associated with (a) to (k).</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<b>Part C2 - Compartmentation &amp; Separation</b>					
C2.1 Application of Part			X		Informational. C2.2, C2.3 and C2.4 do not apply to a carpark provided with a sprinkler system.
C2.2 General Floor Area & Volume Limitations		X			<p>The size of any fire compartment or atrium in a Class 5, 6, 7, 8 or 9 building must not exceed the relevant maximum floor area and maximum volume set out in Table C2.2 &amp; C2.5, except as permitted in C2.3.</p> <p><b>Basement 1 Level exceeds 5,000m2 and therefore considered a <i>large isolated building</i>.</b></p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<p>C2.3 Large Isolated Buildings</p>				<p>X</p>	<p>The size of a fire compartment in a building may exceed that specified in Table C2.2 where the building is Class 5, 6, 7 or 9 and is protected throughout with a sprinkler system complying with Specification E1.5 and is provided with a perimeter vehicular access complying with C2.4(b)</p> <p><b>The building is considered a large isolated building and therefore required to be provided with:</b></p> <ul style="list-style-type: none"> <li>• a sprinkler system complying with Spec E1.5; and</li> <li>• perimeter vehicle access is not compliant with C2.4.</li> </ul>
<p>C2.4 Requirements for Open Space and Vehicular access</p>		<p>X</p>			<p>(b) Vehicular access required by this Part—</p> <ul style="list-style-type: none"> <li>(i) must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from a public road around the entire building; and</li> <li>(ii) must have a minimum unobstructed width of 6 m with no part of its furthest boundary more than 18 m from the building and in no part of the 6 m width be built upon or used for any purpose other than vehicular or pedestrian movement; and</li> <li>(iii) must provide reasonable pedestrian access from the vehicular access to the building; and</li> <li>(iv) must have a load bearing capacity and unobstructed height to permit the operation and passage of fire brigade vehicles; and</li> <li>(v) must be wholly within the allotment except that a public road complying with (i), (ii), (iii) and (iv) may serve as the vehicular access or part thereof.</li> </ul>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p><b>DTS non-compliance</b></p> <p>Perimeter vehicular access around the entire building is not provided and therefore does not comply.</p> <p>It is recommended that a Fire Engineered be engaged at this stage to determine if a Performance Solution is possible.</p> 
C2.5 Class 9a & 9c Buildings			X		Not applicable. Not a 9a or 9c building.
C2.6 Vertical Separation of openings in external walls	X				<p>(a) In a building of Type A construction, 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 450mm outside the lower opening (measured horizontally), the openings must be separated by –</p> <ul style="list-style-type: none"> <li>(i) A spandrel which – <ul style="list-style-type: none"> <li>(A) Is not less than 900mm in height; and</li> <li>(B) Extends not less than 600mm above the upper surface of the intervening floor; and</li> <li>(C) Is of non combustible material having an FRL on not less 60/60/60; or</li> </ul> </li> <li>(ii) Part of a curtain wall or panel wall that complies with (i); or</li> <li>(iii) Construction that complies with (i) behind a curtain wall and has any gaps packed with non-combustible material that will withstand thermal expansion and structural movement of the walling without the loss of seal against fire and smoke; or</li> </ul>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(iv) A slab or other horizontal construction that –</p> <ul style="list-style-type: none"> <li>(A) Projects outwards from the external face of the wall not less than 1100mm; and</li> <li>(B) Extends along the wall not less than 450mm beyond the openings concerned; and</li> <li>(C) Is non-combustible and has an FRL of not less than 60/60/60.</li> </ul> <p>(b) The requirements of (a) do not apply to –</p> <ul style="list-style-type: none"> <li>(i) An open-deck carpark; or</li> <li>(ii) A building which has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification E1.5 installed throughout; or</li> <li>(iii) Openings within the same stairway; or</li> <li>(iv) Openings in external walls where the floor separating the storeys does not require an FRL with respect to integrity and insulation.</li> </ul> <p>(c) For the purposes of C2.6, window or other opening means that part of the external wall of a building that does not have an FRL of 60/60/60 or greater.</p> <p><b>The building is required to be sprinkler protected to comply with the large isolated building requirements and therefore the provisions of C2.6 do not apply.</b></p>
C2.7 Separation by Fire Walls				X	<p>Construction – a fire wall must be constructed in accordance with the following:</p> <ul style="list-style-type: none"> <li>(i) 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; except where Tables 3.9, 4.2 and 5.2 of Specification C1.1 permit a lower FRL on the carpark side.</li> <li>(ii) Any openings in the 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.</li> <li>(iii) Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not pass through or cross the fire wall unless the required fire resisting performance of the fire wall is maintained.</li> </ul> <p>Separation of fire compartments – a part of a building separated from the remainder of the building by a fire wall may be treated as a separate fire compartment if it is constructed in accordance with (a) and the fire wall extends to the underside of –</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					(i) A floor having an FRL required for a fire wall; or (ii) The roof covering. <b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b>
C2.8 Separation of Classifications in the same storey				X	In a building containing different classifications located alongside one other in the same storey - (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 the higher FRL prescribed in Table 3 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. <b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b>
C2.9 Separation of Classifications in different storeys				X	If parts of different classification are situated one above the other in adjoining storeys they must be separated as follows – (a) Type A construction - the floor between the adjoining parts must have an FRL of not less than that prescribed in Specification C1.1 for the classification of the lower storey. <b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b>
C2.10 Separation of lifts shafts				X	Any lift connecting more than 2 storeys, or more than 3 storeys where the building is sprinkler protected must be separated from the remainder of the building by enclosure in a shaft in which – (i) For Type A construction – the walls have the FRL prescribed by Specification C1.1; and Openings for lift landing doors and services must be protected in accordance with the DTS provisions of Part C3. <b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b>
C2.11 Stairways and lifts in one shaft	X				A stairway and lift are not be in the same shaft.
C2.12 Separation of Equipment				X	(a) Equipment other than that described in (b) and (c) must be separated from the remainder of the





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>building with construction complying with (d), if that equipment comprises –</p> <ul style="list-style-type: none"> <li>(i) lift motors and lift control panels or</li> <li>(ii) Emergency generators used to sustain emergency equipment operating in the emergency mode; or</li> <li>(iii) Central smoke control plant; or</li> <li>(iv) Boilers; or</li> <li>(v) A battery system installed in that building that has a total voltage of 12 volts or more and a storage capacity of 200kWh or more.</li> </ul> <p>(b) Equipment need not be separated in accordance with (a) if the equipment comprises-</p> <ul style="list-style-type: none"> <li>(i) Smoke control exhaust fans located in the air stream which are constructed for high temperature operation in accordance with Specification E2.2b; or</li> <li>(ii) Stair pressurizing equipment installed in compliance with AS 1668.1; or</li> <li>(iii) A lift installation without a machine room; or</li> <li>(iv) Equipment otherwise adequately separated from the remainder of the building.</li> </ul> <p>(c) Separation of onsite fire pumps must comply with the requirements of AS2419.1.</p> <p>(d) Separating construction must have –</p> <ul style="list-style-type: none"> <li>(i) Except as provided by (ii) – <ul style="list-style-type: none"> <li>(A) An FRL is required by Specification C1.1, but not less than 120/120/120; and</li> <li>(B) Any doorway protected with a -/120/30 self-closing fire door; or</li> </ul> </li> <li>(ii) When separating a lift shaft and lift motor room, an FRL not less than 120/-/-.</li> </ul> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></b></p>
C2.13 Electrical Supply				X	<ul style="list-style-type: none"> <li>(a) An electricity sub-station must be separated from the building in accordance with the Energy Authority Requirements (i.e. Ausgrid).</li> <li>(b) A main switchboard located within the building (and which sustains emergency equipment operating in the emergency mode) must – <ul style="list-style-type: none"> <li>(i) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and</li> </ul> </li> </ul>





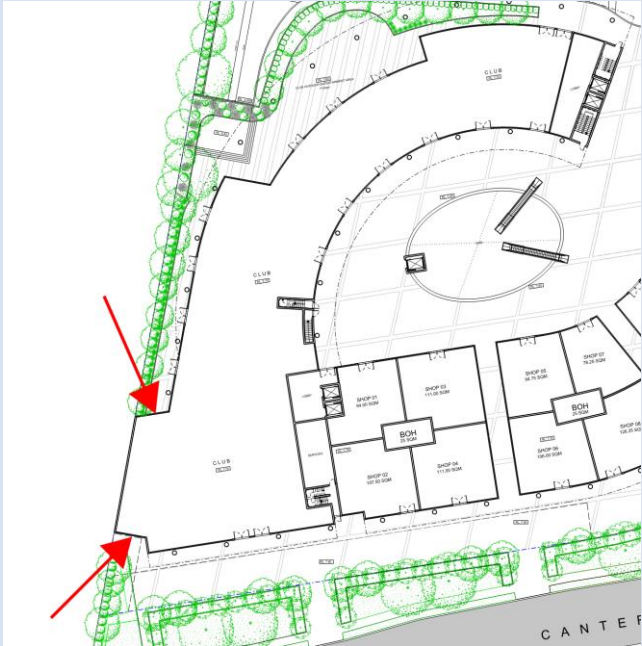
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> <li>(ii) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30.</li> <li>(c) Electrical conductors located within the building that supply – <ul style="list-style-type: none"> <li>(i) a substation located within the building which supplies a main switchboard covered by (b); or</li> <li>(ii) a main switchboard covered by (b), must—</li> <li>(iii) have a classification in accordance with AS/NZS 3013-2005 of not less than— <ul style="list-style-type: none"> <li>(A) if located in a position that could be subject to damage by motor vehicles — WS53W; or</li> <li>(B) otherwise — WS52W; or</li> </ul> </li> <li>(iv) be enclosed or otherwise protected by construction having an FRL of not less than 120/120/120</li> </ul> </li> <li>(d) where emergency equipment is required in a building, all switchboards in the electrical installation, which sustain the electricity supply to the emergency equipment, must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear.</li> <li>(e) For the purposes of (d), emergency equipment includes but it is not limited to – <ul style="list-style-type: none"> <li>(i) Fire hydrant booster pumps</li> <li>(ii) Pumps for automatic sprinkler systems, water spray, chemical fluid suppression systems or the like.</li> <li>(iii) Pumps for fire hose reels where such pumps and fire hose reels form the sole means of fire protection in the building.</li> <li>(iv) Air handling systems designed to exhaust and control the spread of fire and smoke.</li> <li>(v) Emergency lifts.</li> <li>(vi) Control and indicating equipment.</li> <li>(vii) Emergency warning and intercom systems (EWIS).</li> </ul> </li> </ul> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
C2.14			X		Not applicable. Not a Class 2 or 3 building.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
Public corridors in Class 2 & 3 Buildings					
<b>Part C3 - Protection of Openings</b>					
C3.1 Application of Part			X		Informational. The DTS provisions of this Part do not apply to- <ul style="list-style-type: none"> <li>(i) Control joints, weep holes and the like in external walls of masonry construction and joints between panels in external walls of pre-cast concrete panel construction if, in all cases they are not larger than necessary for the purpose; and</li> <li>(ii) Non-combustible ventilators for subfloor or cavity ventilation, if each does not exceed 45000m in face area and spaced not less than 2m from any other ventilator in the same wall; and</li> <li>(iii) Openings in the vertical plane formed between building elements at the construction edge or perimeter of a balcony or verandah, colonnade, terrace, or the like and</li> <li>(iv) In a carpark –               <ul style="list-style-type: none"> <li>(A) Service penetrations through; and</li> <li>(B) Openings formed by a vehicle ramp in, a floor other than a floor that separates a part not uses as a carpark, providing the connected floors comply as a single fire compartment for the purposes of all other requirements of the DTS provisions of Sections C, D &amp; E.</li> </ul> </li> <li>(f) For the purposes of DTS provisions of this Part, openings in building elements required to be fire resisting include doorways, windows (including any associated fanlight), infill panels and fixed or openable glazed areas that do not have the required FRL.</li> <li>(g) For the purposes of the DTS provisions of this part, openings other than those covered under (a)(iii), between building elements such as columns, beams and the like, in the plane formed at the construction edge of the perimeter of the building, are deemed to openings in the external wall.</li> </ul>
C3.2 Protection of openings in external walls		X			(a) Openings in an external wall that is required to have an FRL must be protected in accordance with C3.4: <ul style="list-style-type: none"> <li>(i) if the distance between the opening and the fire-source feature is less than 3 m from a side or rear boundary; or</li> </ul>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(ii) less than 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or</p> <p>(iii) less than 6 m from another building on the allotment that is not Class 10;</p> <p>If wall wetting sprinklers are to be used they are to be located externally.</p> <p>if required to be protected under (a), not occupy more than 1/3 of the area of the external wall of the storey in which it is located.</p> <p><b><u>DTS non-compliance</u></b></p> <p><b>The windows located within 3m of the side boundary on Ground Level, Level 1 &amp; 2 are required to be protected in accordance with Clause C3.4.</b></p>  <p>Ground Level.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
<p>C3.3 Separation of external walls and associated openings in different fire compartments</p>	<p>X</p>				<p><b>For the purposes of this provision, parts of the same building located within 6m, are considered one fire compartment.</b></p>
<p>C3.4 Acceptable Methods of Protection</p>			<p>X</p>		<p>(a) Where protection is required to doorways and windows and other openings they must be protected as follows:</p> <p>(i) Doorways</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> <li>❖ Internal or external wall wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or</li> <li>❖ -/60/30 fire doors that are self-closing or automatic closing</li> </ul> <p>(ii) Windows</p> <ul style="list-style-type: none"> <li>❖ Internal or external wall wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position or;</li> <li>❖ -/60- fire windows that are automatic closing or permanently fixed in the closed position or</li> <li>❖ -/60- automatic closing fire shutters.</li> </ul> <p>(iii) Other openings –</p> <ul style="list-style-type: none"> <li>❖ Excluding voids – internal or external wall wetting sprinklers as appropriate or</li> <li>❖ Construction having a FRL not less than - /60/-.</li> </ul> <p>(b) Fire doors, fire windows and fire shutters must comply with Specification C3.4.</p>
C3.5 Doorways in Fire Walls			X		<p>(a) The aggregate width of openings for doorways in a fire wall, which are not part of a horizontal exit, must not exceed ½ the length of the fire wall, and each doorway must be protected by –</p> <ul style="list-style-type: none"> <li>(i) 2 fire doors or fire shutters, one on each</li> <li>(ii) side of the doorway, each of which has an FRL not less than ½ that required by Specification C1.1 for the fire wall except that each door or shutter must have an insulation level of at least 30; or</li> <li>(iii) A fire door on one side and a fire shutter on the other side of the doorway, each of which complies with (i); or</li> <li>(iv) A single fire door or fire shutter which has an FRL of not less than that required by Specification C1.1 for the fire wall except that each door or shutter must have an insulation level of at least 30.</li> </ul> <p>(b) A fire door or fire shutter required by (a)(i), (ii) or (iii) must be self-closing, or automatic closing in accordance with (c) &amp; (d).</p> <p>(c) The automatic closing operation required by (b) must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with AS1670.1 and located on each</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>side of the fire wall not more than 1.5m horizontal distance from the opening.</p> <p>(d) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D) complying with Specification E1.5, is installed in the building, activation of the system in either fire compartment separated by the fire wall must also initiate the automatic closing operation.</p>
C3.6 Sliding Fire Doors			X		<p>Sliding fire doors normally held open, must fail safe closed in the event of power failure to the door, upon activation of heat or smoke detectors, and upon activation of sprinklers located in either fire compartment separated by the fire wall.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
C3.7 Protection of Doorways in horizontal exits			X		<p>Not applicable. Horizontal exits are not proposed or required.</p>
C3.8 Openings in fire isolated exits				X	<p>(a) Doorways that open into fire-isolated stairways, fire-isolated passageways or fire isolated ramps, and are not doorways opening to a road or open space, must be protected by -/60/30 fire doors that are self-closing, or automatic closing in accordance with (b) and (c).</p> <p>(i) The automatic-closing operation must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with AS1670.1 and located on each side of the fire wall not more than 1.5m horizontal distance from the approach side of the doorway.</p> <p>(ii) Where any other required suitable fire alarm system, including a sprinkler system complying with Specification E1.5, is installed in the building, activation of the system in either fire compartment separated by the fire wall must also initiate the automatic closing operation.</p> <p>(b) A window in an external wall of a fire isolated stairway, fire isolated passageway or fire isolated ramp must be protected in accordance with C3.4 if it is within 6m of, and exposed to, a window or other opening in a wall of the same building, other than in the same fire-isolated enclosure.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
C3.9 Service Penetrations in fire-isolated exits				X	<p>Fire-isolated exits must not be penetrated by any services <b>other</b> than –</p> <ul style="list-style-type: none"> <li>(a) electrical wiring permitted by D2.7(e) to be installed in the exit; or</li> <li>(b) ducting associated with a pressurisation system if it – <ul style="list-style-type: none"> <li>(i) is constructed of material having an FRL of not less than -/120/60 where it passes through any other part of the building; and</li> <li>(ii) Does not open into any other part of the building; or</li> </ul> </li> <li>(c) Water supply pipes for fire services.</li> </ul> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
C3.10 Openings in Fire isolated lift shafts				X	<ul style="list-style-type: none"> <li>(a) Doorways – if a lift shaft is required to be fire isolated, an entrance doorway to that shaft must be protected by -/60/- fire doors that- <ul style="list-style-type: none"> <li>(i) comply with AS 1735.11, and</li> <li>(ii) are set to remain closed except when discharging or receiving, passengers, goods or vehicles.</li> </ul> </li> <li>(b) 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 35,000mm<sup>2</sup> in area.</li> </ul> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
C3.11 Bounding Construction: Class 2, 3 buildings and 4 Parts			X		Not applicable. Not a Class 2,3 or 4 building.
C3.12 Openings in floors and ceilings for services				X	<p>Where services pass through a floor which is required to achieve a FRL or a ceiling required to have a RISF, the service must be enclosed within a fire resisting shaft or fire protected in accordance with Clause C3.15.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
C3.13 Openings in Shafts				X	<p>In a building of Type A construction, an opening in a wall providing access to a ventilating, pipe, garbage or other service shaft must be fire protected in accordance with this clause.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
C3.15 Openings for Service Installations				X	<p>Where services pass through an element which is required to achieve a FRL (other than an external wall or roof), the service must be fire stopped by a tested system or Specification C3.15.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
C3.16 Construction Joints				X	<p>Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner identical with a prototype tested in accordance with AS 1530.4 to achieve the required FRL.</p> <p>The requirements above do not apply where joints, spaces and the like between fire protected timber elements are provided with cavity barriers in accordance with Specification C1.13.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
C3.17 Columns protected in lightweight construction to achieve an FRL			X		<p>Any column protected by lightweight construction to achieve an FRL which passes through a building element that is required to have an FRL or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly of construction which has achieved the required FRL or resistance to the incipient spread of fire.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<b>SECTION D ACCESS &amp; EGRESS</b>					
<b>Part D1 - Provision for Escape</b>					
D1.1 Application of Part			X		The DTS provisions of this Part do not apply to the internal parts of a sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building.
D1.2 Number of Exits required	X				<p>(a) <b>All buildings</b> — Every building must have at least one exit from each storey.</p> <p>(b) <b>Class 2 to 8 buildings</b> — In addition to any horizontal exit, not less than 2 exits must be provided from the following:</p> <p>(i) Each storey if the building has an effective height of more than 25 m.</p> <p>(ii) A Class 2 or 3 building subject to C1.5.</p> <p>(c) <b>Basements</b> — 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</p>





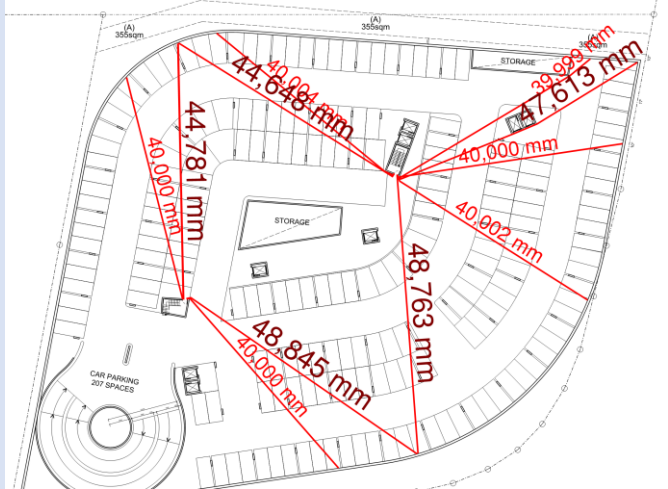
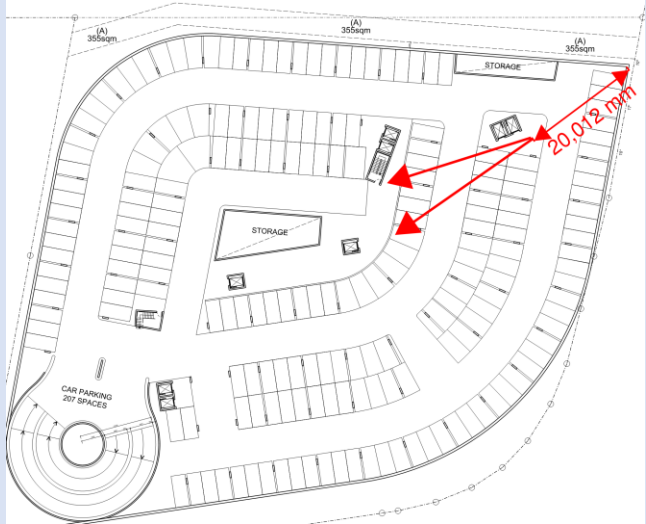
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>rise within the building of more than 1.5 m, unless—</p> <ul style="list-style-type: none"> <li>(i) the floor area of the storey is not more than 50 m<sup>2</sup>; and</li> <li>(ii) the distance of travel from any point on the floor to a single exit is not more than 20 m.</li> </ul> <p>(d) <b>Class 9 buildings</b> — In addition to any horizontal exit, not less than 2 exits must be provided from the following:</p> <ul style="list-style-type: none"> <li>(i) Each storey if the building has a rise in storeys of more than 6 or an effective height of more than 25 m.</li> <li>(ii) Any storey which includes a patient care area in a Class 9a health-care building.</li> <li>(iii) Any storey that contains sleeping areas in a Class 9c aged care building.</li> <li>(iv) Each storey in a Class 9b building used as an early childhood centre.</li> <li>(v) Each storey in a primary or secondary school with a rise in storeys of 2 or more.</li> <li>(vi) Any storey or mezzanine that accommodates more than 50 persons, calculated under D1.13.</li> </ul> <p>(g) <b>Access to exits</b> — Without passing through another sole-occupancy unit every occupant of a storey or part of a storey must have access to—</p> <ul style="list-style-type: none"> <li>(i) an exit; or</li> <li>(ii) at least 2 exits, if 2 or more exits are required.</li> </ul> <p><b>Building complies.</b></p>
<p>D1.3 When Fire Isolated exits are required</p>				X	<p>(b) <b>Class 5, 6, 7 or 9 buildings</b> — Every stairway or ramp serving as a required exit must be fire-isolated unless—</p> <ul style="list-style-type: none"> <li>(i) it connects, passes through or passes by not more than 2 consecutive storeys and one extra storey of any classification may be included if— <ul style="list-style-type: none"> <li>(A) the building has a sprinkler system (other than a FPAA101D system) complying with Specification E1.5 installed throughout; or</li> <li>(B) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having— <ul style="list-style-type: none"> <li>(bb) an FRL of –/60/60, if non-loadbearing; and</li> <li>(cc) an FRL of 90/90/90 for Type A construction; and</li> </ul> </li> </ul> </li> </ul>

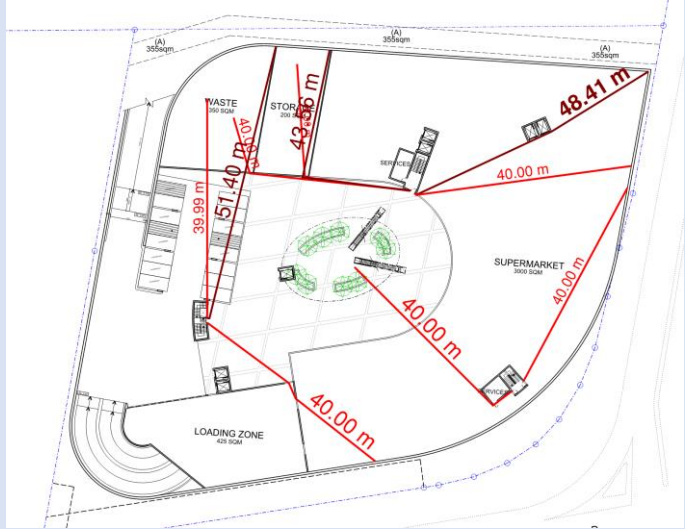
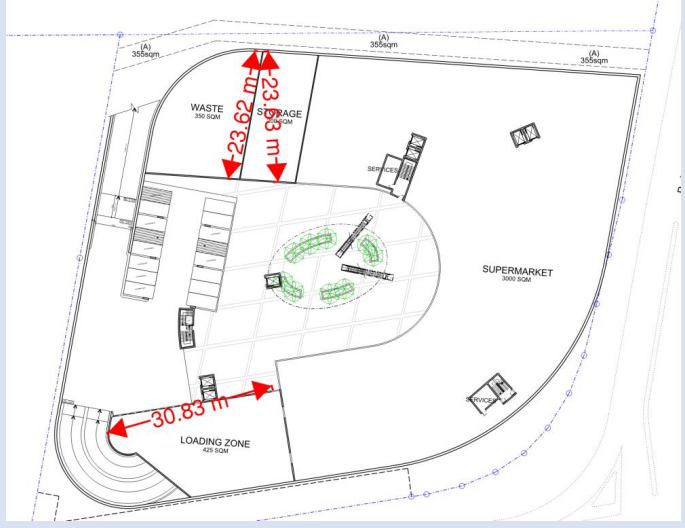


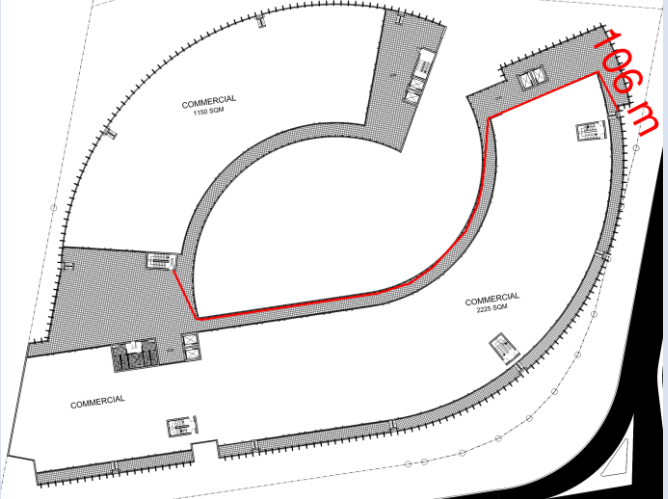


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(dd) no opening that could permit the passage of fire or smoke.</p> <p><b>All stairways within the subject building are fire-isolated as required.</b></p>
D1.4 Exit Travel Distances		X			<p>(c) <b>Class 5, 6, 7, 8 or 9 buildings</b> — Subject to (d), (e) and (f)—</p> <p>(i) no point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40 m; and</p> <p>(ii) in a Class 5 or 6 building, the distance to a single exit serving a storey at the level of access to a road or open space may be increased to 30 m.</p> <p>(f) <b>Assembly buildings</b> — In a Class 9b building other than a school or early childhood centre, the distance to one of the exits may be 60 m if—</p> <p>(i) the path of travel from the room concerned to that exit is through another area which is a corridor, hallway, lobby, ramp or other circulation space; and</p> <p>(ii) the room is smoke-separated from the circulation space by construction having an FRL of not less than 60/60/60 with every doorway in that construction protected by a tight fitting, self-closing, solid-core door not less than 35 mm thick; and</p> <p>(iii) the maximum distance of travel does not exceed 40 m within the room and 20 m from the doorway to the room through the circulation space to the exit.</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p><b>DTS non-compliances</b></p> <p><b>Basement 2 - The exit travel distance is greater than 40m, maximum being 48.8m.</b></p>  <p><b>Basement 2 – The distance to a point of choice from the north eastern corner after 20m is not in “different directions”, and therefore does not comply. Refer to the marked up plan detailing the distance to a point of choice after 20m.</b></p> 

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p><b>Basement 1 - The exit travel distance is greater than 40m, maximum being 51.4m. The travel distance will be greatly increase upon fitout of the supermarket.</b></p>  <p><b>Basement 1 – The distance to a point of choice from the “Waste”, Storage” and “Loading Zone” is greater than 20m, maximum being 30.83m. Refer to the marked-up plan detailing the distance to a point of choice after 20m.</b></p>  <p><b>Level 1 &amp; 2 – The distance to a point of choice from the north eastern corner is greater than 20m, being 106m.</b></p> <p><b>Please note D1.2 requires access to exits must not pass through another SOU.</b></p> <p><b>An additional exit will be required.</b></p>


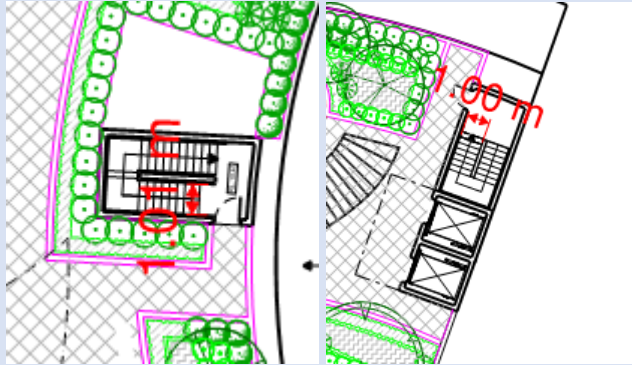
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
<p>D1.5 Distance Between Alternative Exits</p>		<p>X</p>			<p>Exits that are required as alternative means of egress must be—</p> <ul style="list-style-type: none"> <li>(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</li> <li>(b) not less than 9 m apart; and</li> <li>(c) not more than— <ul style="list-style-type: none"> <li>(iv) in all other cases — 60 m apart; and</li> </ul> </li> <li>(d) located so that alternative paths of travel do not converge such that they become less than 6 m apart.</li> </ul> <p><b><u>DTS non-compliance</u></b></p> <p><b>Roof - Exits that are required as alternative means of egress is greater than 60m, being 72.58m.</b></p>

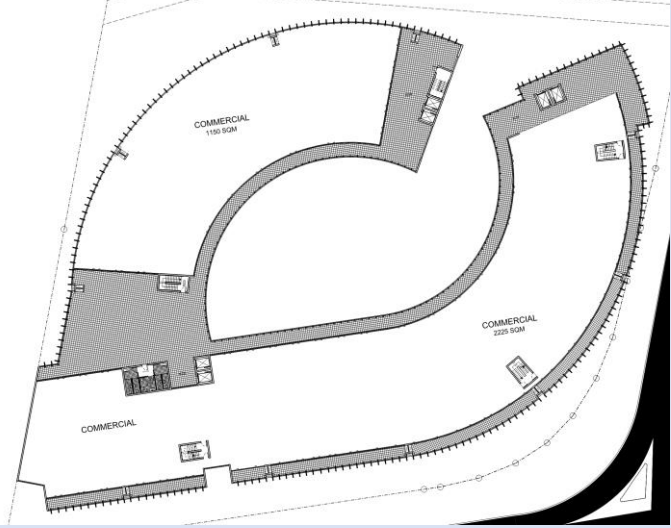
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>D1.6 Dimensions of Exits and paths of Travel to Exits</p>		X			<p>In a required exit or path of travel to an exit—</p> <ul style="list-style-type: none"> <li>(a) the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm; and</li> <li>(b) the unobstructed width of each exit or path of travel to an exit, except for doorways, must be not less than— <ul style="list-style-type: none"> <li>(i) 1 m; or</li> <li>(ii) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or ward area; and</li> </ul> </li> <li>(c) if the storey or mezzanine accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width, except for doorways, must be not less than— <ul style="list-style-type: none"> <li>(iii) 1 m plus 250 mm for each 25 persons (or part) in excess of 100; o</li> </ul> <p>if the storey or mezzanine accommodates more than 200 persons, the aggregate unobstructed width, except for doorways, must be increased to—</p> <ul style="list-style-type: none"> <li>(i) 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway</li> </ul> </li> </ul>

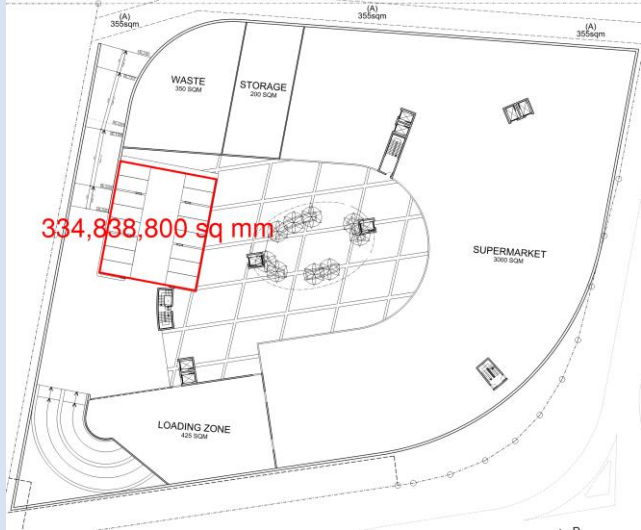
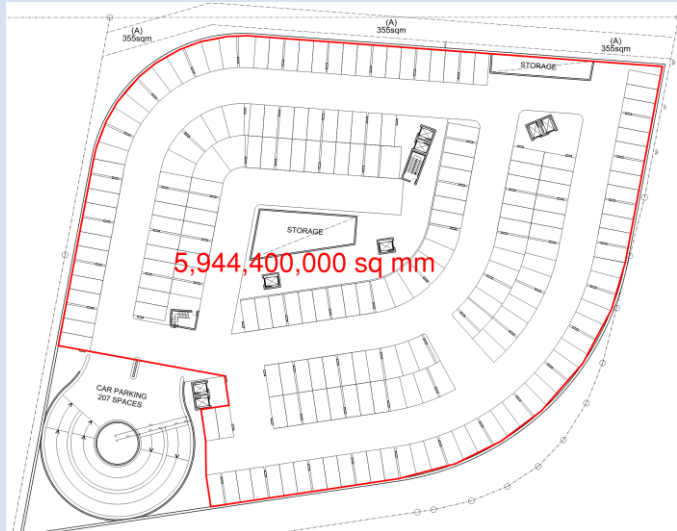


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>or ramp with a gradient steeper than 1 in 12; or</p> <p>(ii) in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200; and</p> <p>(d) the unobstructed width of a doorway must be not less than—</p> <p>(i) the unobstructed width of each exit provided to comply with (b), (c), (d) or (e), minus 250 mm; or</p> <p>(ii) in any other case except where it opens to a sanitary compartment or bathroom — 750 mm wide; and</p> <p>(e) the unobstructed width of a required exit must not diminish in the direction of travel to a road or open space, except where the width is increased in accordance with (b)(ii) or (f)(i); and</p> <p>(f) the required width of a stairway or ramp must—</p> <p>(i) be measured clear of all obstructions such as handrails, projecting parts of balustrades or other barriers and the like; and</p> <p>(ii) extend without interruption, except for ceiling cornices, to a height not less than 2 m vertically above a line along the nosings of the treads or the floor surface of the ramp or landing.</p> <p>(g) to determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D1.13; and</p> <p><b><u>DTS non-compliance</u></b></p> <p><b>Rooftop – The architect is required to nominate the proposed population of the “Rooftop Entertainment Area”.</b></p> <p><b>Under BCA Clause D1.13 a “public hall” (closest use in D1.13) details that 1m<sup>2</sup> per person. Therefore, the population of the “Rooftop Entertainment Area” would be 622 people.</b></p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>Based on the population of 622 people the required aggregate width is 6m.</p> <p>The aggregate width of the proposed stairway is 2m.</p>  <p>Level 2 &amp; 1 - Under BCA Clause D1.13 a “office” (closest use in D1.13) details that 10m<sup>2</sup> per person. Therefore, the population of the “Commercial” would be 223 (south) &amp; 115 people (north).</p> <p>South - Based on the population of 225 people the required aggregate width is 2.5m. The aggregate width of the proposed stairway is 3m Part complies.</p> <p>North - Based on the population of 115 people the required aggregate width is 1.25m. The aggregate width of the proposed stairway is 2m. Part complies.</p>

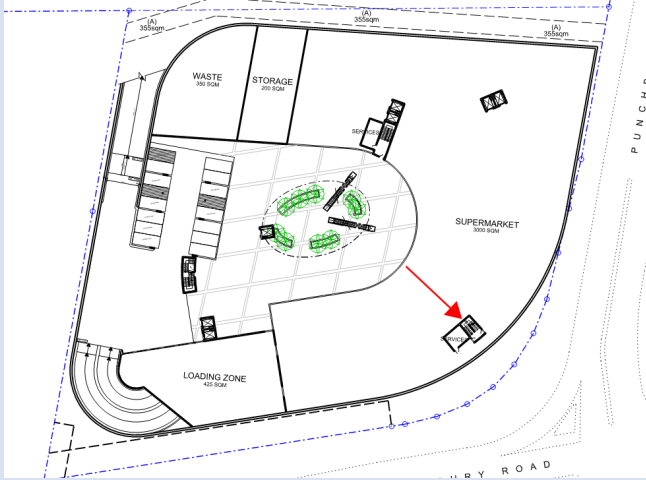
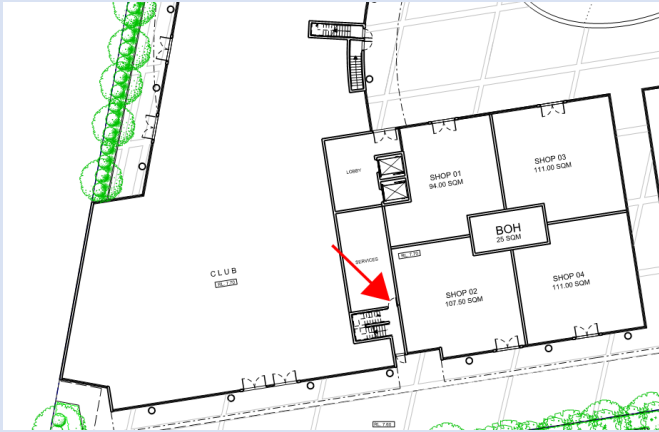
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>Ground – Multiple exits are provided. Part complies.</p> <p><b>Basement 1 - Under BCA Clause D1.13 a “shop” (closest use in D1.13) details that 5m<sup>2</sup> per person. Therefore, the population of the shop would be 600 people.</b></p> <p><b>Based on the shop population of 600 people the required aggregate width is 5.5m.</b></p> <p><b>The aggregate width of the stairways is 3m. Does not comply</b></p> <p>Loading zone, storage, waste and carpark - D1.13 details that 30m<sup>2</sup> per person. Therefore, the population of the shop would be 44 people.</p> <p>Based on the loading zone, storage, waste and carpark population of 44 people the required aggregate width is 1m.</p> <p>The aggregate width of the stairways is 2m. Part complies.</p>

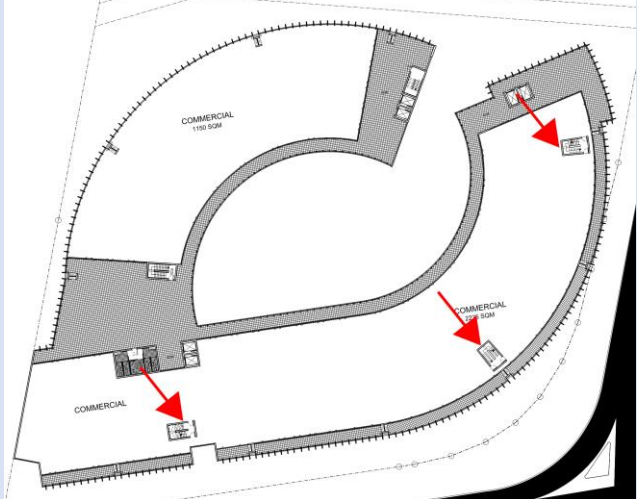
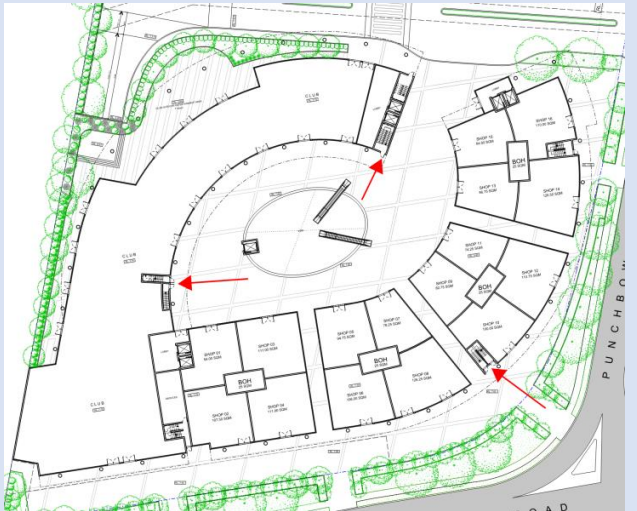
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>Basement 2 - Under BCA Clause D1.13 a “carpark” (closest use in D1.13) details that 30m<sup>2</sup> per person. Therefore, the population of the carpark would be 199 people.</p> <p>Based on the carpark population of 199 people the required aggregate width is 2m.</p> <p>The aggregate width of the stairways is 2m. Part complies.</p>  <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D1.7 Travel via Fire Isolated Stairs		X			<p>(a) 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—</p> <p>(i) a public corridor, public lobby or the like; or</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					<ul style="list-style-type: none"><li>(ii) a sole-occupancy unit occupying all of a storey; or</li><li>(iii) a sanitary compartment, airlock or the like.</li><li>(b) 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—<ul style="list-style-type: none"><li>(i) to a road or open space; or</li><li>(ii) to a point—<ul style="list-style-type: none"><li>(A) in a storey or space, within the confines of the building, that is used only for pedestrian movement, car parking or the like and is open for at least 2/3 of its perimeter; and</li><li>(B) from which an unimpeded path of travel, not further than 20 m, is available to a road or open space; or</li></ul></li><li>(iii) into a covered area that—<ul style="list-style-type: none"><li>(A) adjoins a road or open space;</li><li>(B) and is open for at least 1/3 of its perimeter; and</li><li>(C) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and</li><li>(D) provides an unimpeded path of travel from the point of discharge to the road or open space of not more than 6 m.</li></ul></li></ul></li><li>(c) Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6 m of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, that part of the wall must have—<ul style="list-style-type: none"><li>(i) an FRL of not less than 60/60/60; and</li><li>(ii) any openings protected internally in accordance with C3.4, for a distance of 3 m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser.</li></ul></li><li>(d) If more than 2 access doorways, not from a sanitary compartment or the like, open to a required fire-isolated exit in the same storey—<ul style="list-style-type: none"><li>(i) a smoke lobby in accordance with D2.6 must be provided; or</li><li>(ii) the exit must be pressurised in accordance with AS/NZS 1668.1.</li></ul></li></ul>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(e) A ramp must be provided at any change in level less than 600 mm in a fire-isolated passageway in a Class 9 building.</p> <p><b><u>DTS non-compliance</u></b></p> <p>The supermarket on Basement 1 does not occupy all of the storey and therefore the FIS is not permitted to open directly into it.</p>  <p><b>Ground Floor – An airlock is required to be provided from the “Service Room” discharging into the fire-isolated stairway.</b></p>  <p>The commercial tenancy on Level 1 &amp; 2 currently occupies the whole floor and therefore complies, however, where the floor is divided in the future it will create a non-compliance where the doorways open directly open into the fire isolated stairway. This should be considered at this stage.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>The stairways discharging into the covered area on Ground Floor must have a height of no less than 3 m.</p>  <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D1.8 External Stairways or ramps in lieu of Fire Isolated Stairs			X		Not applicable. No stairways are proposed in lieu of FIS.
D1.9 Travel by non-fire-isolated stairs			X		Not applicable. No non-fire-isolated stairways are proposed.
D1.10 Discharge from Exits				X	(a) 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.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(b) If a required exit leads to an open space, the path of travel to the road must have an unobstructed width throughout of not less than—</p> <p>(i) the minimum width of the required exit;</p> <p>(ii) or 1 m,</p> <p>whichever is the greater.</p> <p>(c) If an exit discharges to open space that is at a different level than the public road to which it is connected, the path of travel to the road must be by—</p> <p>(i) 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</p> <p>(ii) a stairway complying with the Deemed-to-Satisfy Provisions of the BCA.</p> <p>(d) The discharge point of alternative exits must be located as far apart as practical.</p> <p>(e) The number of persons accommodated must be calculated according to D1.13.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
D1.11 Horizontal Exits			X		Not applicable. No horizontal exits proposed or required.
D1.12 Non-required stairways, ramps or escalators			X		Not applicable. No escalator, moving walkway or non-required non-fire-isolated stairway or pedestrian ramp is proposed.
D1.13 Number of Persons Accommodated Note NSW Table D1.13 Area per person according to use			X		<p>For the purpose of the Deemed-to-Satisfy provisions, the number of persons accommodated in a storey, room or mezzanine must be determined with consideration to the purpose for which it is used and the layout of the floor area by—</p> <p>(a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in Table D1.13 according to the use of that part, excluding spaces set aside for—</p> <p>(i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and</p> <p>(ii) service ducts and the like, sanitary compartments or other ancillary uses; or</p> <p>(b) reference to the seating capacity in an assembly building or room; or</p> <p>(c) any other suitable means of assessing its capacity.</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					Refer NSW Table D1.13 to calculate area per person according to use.
D1.14 Measurement of Distances			X		<p>Informational.</p> <p>The nearest part of an exit means in the case of—</p> <ul style="list-style-type: none"> <li>(a) a fire-isolated stairway, fire-isolated passageway, or fire-isolated ramp, the nearest part of the doorway providing access to them; and</li> <li>(b) a non-fire-isolated stairway, the nearest part of the nearest riser; and</li> <li>(c) a non-fire-isolated ramp, the nearest part of the junction of the floor of the ramp and the floor of the storey; and</li> <li>(d) a doorway opening to a road or open space, the nearest part of the doorway; and</li> <li>(e) a horizontal exit, the nearest part of the doorway.</li> </ul>
D1.15 Method of Measurement			X		<p>Informational.</p> <p>The following rules apply:</p> <ul style="list-style-type: none"> <li>(a) In the case of a room that is not a sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building, the distance includes the straight-line measurement from any point of the floor of the room to the nearest part of the doorway leading from it, together with the distance from the part of the doorway to the single required exit or point from which travel in different directions to 2 required exits is available.</li> <li>(b) Subject to (d), the distance from the doorway of a sole occupancy unit in a Class 2 or 3 building is measured in a straight line to the nearest part of the required single exit or point from which travel in different directions to 2 required exits is available.</li> <li>(c) Subject to (d), the distance between exits is measured in a straight line between the nearest parts of those exits.</li> <li>(d) Only the shortest distance is taken along a corridor, hallway, external balcony or other path of travel that curves or changes direction.</li> <li>(e) If more than one corridor, hallway, or other internal path of travel connects required exits, for the purposes of D1.5(c) the measurement is along the path of travel through the point at which travel in different directions to those exits is available, as determined in accordance with D1.4.</li> <li>(f) If a wall (including a demountable internal wall) that does not bound – <ul style="list-style-type: none"> <li>(i) A room; or</li> <li>(ii) A corridor, hallway or the like, causes a change in direction in proceeding to a</li> </ul> </li> </ul>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>required exit, the distance is measured along the path of travel past the wall.</p> <p>(iii) If permanent fixed seating is provided, the distance is measured along the path of travel between the rows of seats.</p> <p>(iv) In the case of a non-fire isolated stairway or non-fire isolated ramp, the distance is measured along a line connecting the nosings of the treads, along the slope of the ramp, together with the distance connecting those lines across any intermediate landing.</p>
<p>D1.16 Plant Rooms and lift Motor Rooms: Concession</p>				X	<p>(a) A ladder may be used in lieu of a stairway to provide egress from—</p> <p>(i) a plant room with a floor area of not more than 100 m<sup>2</sup>; or</p> <p>(ii) all but one point of egress from a plant room, a lift machine room or a Class 8 electricity network substation with a floor area of not more than 200 m<sup>2</sup>.</p> <p>(b) A ladder permitted under (a)—</p> <p>(i) may form part of an exit provided that in the case of a fire-isolated stairway it is contained within the shaft; or</p> <p>(ii) may discharge within a storey in which case it must be considered as forming part of the path of travel; and</p> <p>(iii) for a plant room or a Class 8 electricity network substation, must comply with AS 1657; and</p> <p>(iv) for a lift machine room, where access is provided from within a machine room to a secondary floor, a fixed rung type ladder complying with AS 1657 may be used, provided that—</p> <p>(A) the height between the floors is not more than 2800 mm; and</p> <p>(B) the ladder is inclined at an angle to the horizontal not less than 65 degrees nor more than 75 degrees; and</p> <p>(C) the distance between the front face of the ladder and any adjacent obstruction is not less than—</p> <p>(aa) 960 mm, where the ladder is inclined 65 degrees to the horizontal; or</p> <p>(bb) 760 mm, where the ladder is inclined 75 degrees to the horizontal; or</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(cc) a distance that is determined by interpolating the values in (aa) and (bb), where the ladder is inclined at any angle between 65 degrees and 75 degrees to the horizontal; and</p> <p>(D) a clear space not less than 600 mm exists between the foot of the ladder and any equipment.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<p>D1.17 Access to lift pits</p>				X	<p>Access to lift pits must—</p> <p>(a) where the pit depth is not more than 3 m, be through the lowest landing doors; or</p> <p>(b) where the pit depth is more than 3 m, be provided through an access doorway complying with the following:</p> <p>(i) In lieu of D1.6, the doorway must be level with the pit floor and not be less than 600 mm wide by 1980 mm high clear opening, which may be reduced to 1500 mm where it is necessary to comply with (ii).</p> <p>(ii) No part of the lift car or platform must encroach on the pit doorway entrance when the car is on a fully compressed buffer.</p> <p>(iii) Access to the doorway must be by a stairway complying with AS 1657.</p> <p>(iv) In lieu of D2.21, doors fitted to the doorway must be—</p> <p>(A) of the horizontal sliding or outwards opening hinged type; and</p> <p>(B) self-closing and self-locking from the outside; and</p> <p>(C) marked on the landing side with the letters not less than 35 mm high:</p> <p><b>“DANGER LIFTWELL – ENTRY OF UNAUTHORIZED PERSONS PROHIBITED – KEEP CLEAR AT ALL TIMES”</b></p>
<b>Part D2 - Construction of Exits</b>					
<p>D2.1 Application of Part</p>			X		<p>Except for D2.13, D2.14 (a), D2.16, D2.17(d), D2.17(e) and D2.18, the Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of the Class 2 sole-occupancy units.</p> <p>Note NSW D2.1 (entertainment venues)</p>
<p>D2.2 Fire-Isolated stairways and ramps</p>				X	<p>A stairway or ramp (including any landings) that is required to be in a fire resisting shaft must be constructed –</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					(a) Of non-combustible materials; and (b) So that if there is local failure it will not cause structural damage to or impair the fire resistance of the shaft.  <b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification (and structural details)</b>
D2.3 Non-fire Isolated stairways and ramps				X	Not applicable. No non-fire-isolated stairways or ramps are proposed.
D2.4 Separation of Rising and Descending Stairs	X				If a stairway serving as a required exit is required to be fire isolated – (a) There must be no direct connection between – (i) A flight rising from a storey below the lowest level of access to a road or open space; and (ii) A flight descending from a storey above that level ; and (b) Any construction that separates or is common to the rising and descending flights must be- (i) Non-combustible; and (ii) Smoke proof in accordance with Clause 2 of Specification C2.5.
D2.5 Open Access ramps and balconies			X		Not applicable. No open access ramps or balconies are required or provided to meet the smoke hazard management requirements.
D2.6 Smoke Lobbies				X	Smoke lobbies required by D1.7 must be sized and smoke separated from the occupied areas in the storey in accordance with the requirements of this clause.  <b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b>
D2.7 Installations in Exits and Paths of Travel				X	(a) 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. (b) An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like must not be located in any part of a required exit or any corridor, hallway, lobby or the like leading to a required exit. (c) Gas or other fuel services must not be installed in a required exit (d) Services or equipment comprising –





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> <li>(i) Electricity meters, distribution boards or cuts; or</li> <li>(ii) Central telecommunications distribution boards or equipment; or</li> <li>(iii) Electrical motors or other motors service equipment in the building, May be installed in –</li> <li>(iv) A required exit, except for fire-isolated exits specified in (a); or</li> <li>(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</li> <li>(e) Electrical wiring may be installed in a fire-isolated exit if the wiring is associated with; <ul style="list-style-type: none"> <li>(i) A lighting, detection, or pressurization system serving the exit; or</li> <li>(ii) A security, surveillance or management system serving the exit; or</li> <li>(iii) An intercommunication system or an audible or visual alarm system in accordance with D2.22; or</li> <li>(iv) The monitoring of hydrant or sprinkler isolating valves.</li> </ul> </li> </ul> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
D2.8 Enclosure of Space Under Stairs and ramps	X				No space within fire-isolated stairways are enclosed to form a cupboard or similar enclosed space.
D2.9 Width of Stairs			X		Not applicable. No required stairway or ramp exceeds 2 m in width.
D2.10 Pedestrian Ramps				X	<ul style="list-style-type: none"> <li>(a) A fire isolated ramp may be substituted for a fire isolated stairway if the construction enclosing the ramp and the width and ceiling height comply with the requirements for a fire isolated stairway.</li> <li>(b) A ramp serving as a required exit must – <ul style="list-style-type: none"> <li>(i) Where the ramp is also serving as an accessible ramp under Part D3, be in accordance with AS1428.1; or</li> <li>(ii) In any other case, have a gradient not steeper than 1:8.</li> </ul> </li> </ul>





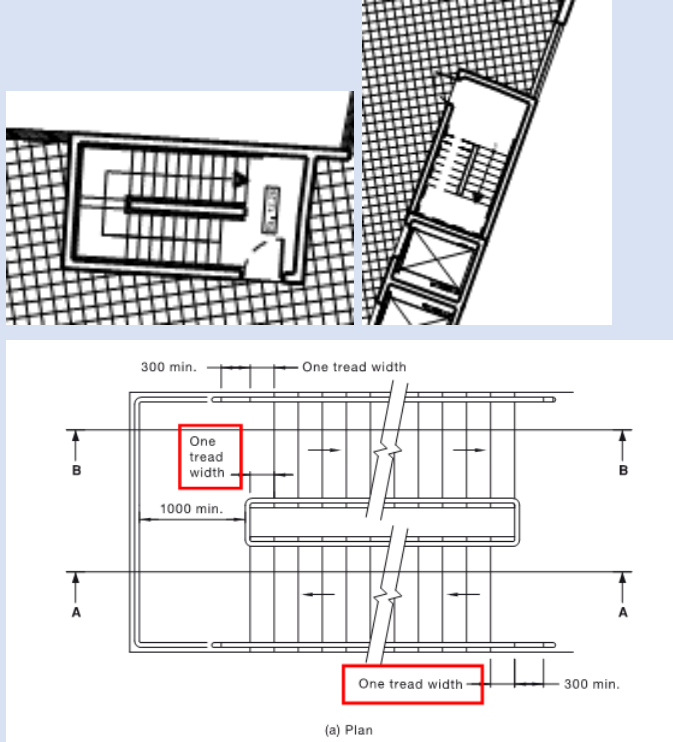
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(c) The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS4586.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D2.11 Fire-Isolated Passageways			X		Not applicable. No fire-isolated passageways are proposed or required.
D2.12 Roof as Open Space				X	<p>If an exit discharges to the roof of a building the roof must –</p> <p>(a) Have an FRL not less than 120/120/120; and</p> <p>(b) Not have any roof lights or other openings with 3m of the path of travel of persons using the exit to reach a road of open space.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D2.13 Goings & Risers				X	<p>Stairways to achieve compliance with this clause relevant to going and riser dimensions.</p> <p>Stairways to achieve constant risers &amp; goings except where minor variations are permitted over flight as detailed in the clause.</p> <p>Treads must have a surface with a slip-resistant classification not less than that listed in Table D2.14 when tested in accordance with AS4586.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D2.14 Landings				X	<p>In a stairway</p> <p>(a) Landings having a maximum gradient of 1:50 may be used in any building to limit the number of risers in each flight and each landing must –</p> <p>(i) Be not less than 750 mm long, and where this involves a change in direction, the length is measured 500 mm from the inside edge of the landing; and</p> <p>(ii) Have –</p> <p>(A) A surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS4586; or</p> <p>(B) A strip at the edge of the landing with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS4586,</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>where the edge leads to a flight below; and</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D2.15 Thresholds				X	<p>The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaves unless the doorway is in a building required to be accessible by Part D3, and in which case the doorway opens to a road or open space and is provided with a threshold ramp or step ramp in accordance with AS 1428.1. In other cases if the doorway opens to a road or open space, external stair landing or external balcony; and the door sill is not more than 190mm above the finished surface of the ground, balcony or the like, to which the doorway opens.</p> <p>Variations to the aforementioned exist for patient care areas in a Class 9a building.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D2.16 Balustrades and other Barriers Note NSW D2.16				X	<p>A continuous barrier (balustrade) must be provided to a roof to which general access is provided, stairs and balconies, driveway ramps etc. where there is a fall of more than 1m.</p> <p>Balustrade construction to comply with Table D2.16a.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D2.17 Handrails		X			<p>(a) Except for handrails referred to in D2.18, handrails must be—</p> <ul style="list-style-type: none"> <li>(i) located along at least one side of the ramp or flight; and</li> <li>(ii) located along each side if the total width of the stairway or ramp is 2 m or more; and</li> <li>(iii) in a Class 9b building used as a primary school— <ul style="list-style-type: none"> <li>(A) have one handrail fixed at a height of not less than 865 mm; and</li> <li>(B) have a second handrail fixed at a height between 665 mm and 750 mm,</li> </ul> <p>measured above the nosings of stair treads and the floor surface of the ramp, landing or the like; and</p> </li> <li>(i) in any other case, fixed at a height of not less than 865 mm measured above the nosings of stair treads and the floor surface of the ramp, landing, or the like; and</li> </ul>




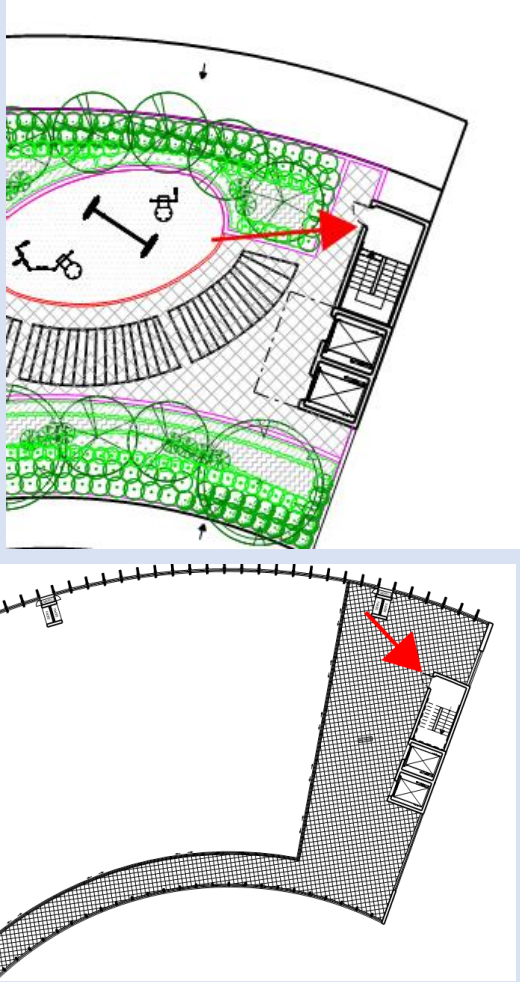
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(ii) continuous between stair flight landings and have no obstruction on or above them that will tend to break a hand-hold; and</p> <p>(iii) in a required exit serving an area required to be accessible, designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail required by (a)(iii)(B).</p> <p>(b) Handrails required to assist people with a disability must be provided in accordance with D3.3.</p> <p><b>DTS non-compliance</b></p> <p><b>The handrails within fire-isolated stairways serving areas required to be accessible (all FIS's in the subject building) are not provided with a one tread offset to comply with Figure 28 of AS 1428.1-2009.</b></p>  <p>(a) Plan DIMENSIONS IN MILLIMETRES</p> <p>FIGURE 28 (in part) HANDRAILS TO STAIRS WITH INTERMEDIATE LANDINGS</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</b></p>
<p>D2.18 Fixed Platforms, walkways and ladders</p>				<p>X</p>	<p>A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail or barrier attached thereto may comply with AS1657 in lieu of D2.13, D2.14 D2.16 and D2.17 if it only serves:</p> <p>(a) Machinery rooms, boiler houses, lift machine rooms, plant-rooms and the like; or</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(b) Non-habitable rooms, such as attics, storerooms and the like that are not used on a frequent or daily basis in the internal parts of a sole occupancy unit in a Class 2 building or Class 4 part of the building.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</b></p>
D2.19 Doorways & Doors				X	<p>(c) A doorway serving as a required exit or forming part of a required exit–</p> <p>(i) Must not be fitted with a revolving door; and</p> <p>(ii) Must not be fitted with a roller shutter or tilt-up door unless –</p> <p>(A) It serves a Class 6, 7 or 8 building or part with a floor area not more than 200m<sup>2</sup>; and</p> <p>(B) The doorway is the only required exit from the building or part; and</p> <p>(C) It is held in the open position while the building or part is lawfully occupied; and</p> <p>(iii) Must not be fitted with a sliding door unless –</p> <p>(A) It leads directly to a road or open space; and</p> <p>(B) The door is able to be opened manually under a force of not more than 110 N; and</p> <p>(iv) If fitted with a door which is power-operated –</p> <p>(A) It must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and</p> <p>(B) If it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door.</p> <p>(d) A power-operated door in a path of travel to a required exit must be able to open manually under a force of not more than 110 N if there is a malfunction or failure of the power source.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</b></p>
D2.20 Swinging Doors		X			<p>A swinging door in a required exit or forming part of a required exit –</p> <p>(a) Must not encroach –</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(i) At any part of its swing by more than 500mm of the required width (including any landings) of a required –</p> <p>(A) Stairway; or</p> <p>(B) Ramp; or</p> <p>(C) Passageway,</p> <p>If it is likely to impede the path of travel of the people already using the exit; and</p> <p>(ii) When fully open, by more than 100 mm on the required width of the required exit, and</p> <p>The measurement of encroachment in each case is to include door handles or other furniture or attachments to the door; and</p> <p>(b) Must swing in the direction of egress unless</p> <p>(i) It serves a building part with a floor area not more than 200m<sup>2</sup>, it is the only required exit from the building part and it is fitted with a device for holding it in the open position; or</p> <p>(ii) It serves a sanitary compartment or airlock (in which case it may swing in either direction; and</p> <p>(c) Must not otherwise impede the path or direction of egress.</p> <p><b><u>DTS non-compliance</u></b></p> <p><b>Ground Floor - The doorways discharging onto Canterbury Road from the Club, serving as required exits, must swing in the direction of egress.</b></p> 

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p><b>Level 1 &amp; 2 &amp; Rooftop - The doorways discharging into the fire-isolated must swing in the direction of egress.</b></p>  <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>
<p>D2.21 Operation of Latch</p>				<p>X</p>	<p>(a) A door in a required exit, forming part of a required exit or in the path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress by –</p> <ul style="list-style-type: none"> <li>(i) A single hand downward action or pushing action on a single device which is located between 900mm and 1.1 m from the floor and if serving an area required to be accessible by Part D3 – <ul style="list-style-type: none"> <li>(A) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and</li> <li>(B) have a clearance between the handle and the back plate or door face at the</li> </ul> </li> </ul>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>center grip section of the handle of not less than 35mm and not more than 45mm; or</p> <p>(ii) a single hand pushing action on a single device which is located between 900mm and 1.2m from the door; and</p> <p>(iii) where the latch operation device referred to in (ii) is not located on the door leaf itself –</p> <p>(A) manual controls to power operated doors must be at least 25mm wide, proud of the surrounding surface and located –</p> <p>(aa) not less than 500mm from an internal corner; and</p> <p>(bb) for a hinged door, between 1m and 2m from the door leaf in any position; and</p> <p>(cc) for a sliding door, within 2m of the doorway and clear of a surface mounted door in the open position.</p> <p>(B) Braille and tactile signage complying with Clause 3 and 6 of Specification D3.6 must identify the latch operation device.</p> <p>(b) The requirements of (a) do not apply to a door that –</p> <p>(i) Serves a vault, strong-room, sanitary compartment, or the like; or</p> <p>(ii) Serves only, or is within –</p> <p>(A) A sole occupancy unit with a floor area not more than 200m<sup>2</sup> in a Class 5, 6, 7 or 8 building; or</p> <p>(B) A space which is otherwise inaccessible to persons at all times when the door is locked; or</p> <p>(iii) Serves –</p> <p>(A) By operating a fail-safe control switch, not contained within the protective enclosure, to actuate a device to unlock the door; or</p> <p>(B) By hand by a person or persons, specifically nominated by the owner, properly instructed as to the duties and responsibilities involved and available at all times when the building is lawfully occupied so that persons in the building or part may immediately escape if there is a fire; or</p> <p>(iv) Is fitted with a fail-safe device which automatically unlocks the door upon the</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>activation of any sprinkler system (other than a FPAA101D system) complying with Specification E1.5, or smoke , or any other detector system deemed suitable in accordance with AS1670.1 installed throughout the building, and is readily operable when unlocked; or</p> <p><b>NSW D2.21 Operation of latch</b></p> <p>(c) The requirements of (a) do not apply in a Class 9b building (other than a school, an early childhood centre or a building used for religious purposes) to a door in a required exit, forming part of a required exit or in the path of travel to a required exit serving a storey or room accommodating more than 100 persons, determined in accordance with D1.13, in which case it must be readily openable—</p> <p>(i) without a key from the side that faces a person seeking egress; and</p> <p>(ii) by a single hand pushing action on a single device such as a panic bar located between 900 mm and 1.2 m from the floor; and</p> <p>(iii) where a two-leaf door is fitted, the provisions of (i) and (ii) need only apply to one door leaf if the appropriate requirements of D1.6 are satisfied by the opening of that one leaf; and</p> <p>(iv) where the door is a door in a path of travel providing re-entry to the building from a balcony, terrace or the like, it may be fitted with key-operated fastenings only, the tongues of which must be locked in the retracted position whenever the building is occupied by the public, so the door can yield to pressure</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
D2.22 Re-entry from Fire isolated exits			X		Not applicable. Effective height is <25m.
D2.23 Signs on Doors				X	<p>(a) A sign, to alert persons that the operation of certain doors must not be impaired, must be installed where it can readily be seen on, or adjacent to—</p> <p>(i) a required—</p> <p>(A) fire door providing direct access to a fire-isolated exit, except a door providing direct egress from a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building; and</p> <p>(B) smoke door,</p> <p>on the side of the door that faces a person seeking egress and, if the door is fitted with a device for holding it in the open position, on</p>





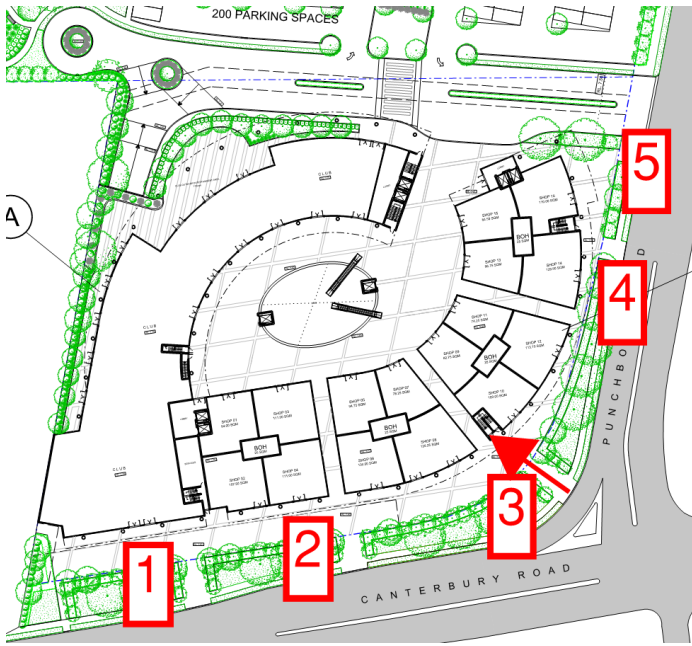
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>either the wall adjacent to the doorway or both sides of the door; and</p> <p>(ii) a—</p> <p>(A) fire door forming part of a horizontal exit; and</p> <p>(B) smoke door that swings in both directions; and</p> <p>(C) door leading from a fire isolated exit to a road or open space, on each side of the door.</p> <p>(b) A sign referred to in (a) must be in capital letters not less than 20 mm high in a colour contrasting with the background and state—</p> <p>(i) for an automatic door held open by an automatic hold-open device— “FIRE SAFETY DOOR—DO NOT OBSTRUCT”; or</p> <p>(ii) for a self-closing door— “FIRE SAFETY DOOR DO NOT OBSTRUCT DO NOT KEEP OPEN”; or</p> <p>(iii) for a door discharging from a fire-isolated exit— “FIRE SAFETY DOOR—DO NOT OBSTRUCT”.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
D2.24 Protection of openable windows				X	<p>(c) Where the lowest level of the window opening is less than 1.7 m above the floor, a window opening covered by (a) must comply with the following:</p> <p>(i) The openable portion of the window must be protected with—</p> <p>(A) a device capable of restricting the window opening; or</p> <p>(B) a screen with secure fittings.</p> <p>(ii) A device or screen required by (i) must—</p> <p>(A) not permit a 125 mm sphere to pass through the window opening or screen; and</p> <p>(B) resist an outward horizontal action of 250 N against the—</p> <p>(aa) window restrained by a device; or</p> <p>(bb) screen protecting the opening; and</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(C) have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden.</p> <p>(d) A barrier with a height not less than 865 mm above the floor is required to an openable window—</p> <p>(i) in addition to window protection, when a child resistant release mechanism is required by (b)(ii)(C); and</p> <p>(ii) where the floor below the window is 4 m or more above the surface beneath if the window is not covered by (a).</p> <p>(e) A barrier covered by (c) except for (e) must not—</p> <p>(i) permit a 125 mm sphere to pass through it; and</p> <p>(ii) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing.</p> <p>(f) A barrier required by (c) to an openable window in—</p> <p>(iii) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, excluding external stairways and external ramps must not permit a 300 mm sphere to pass through it.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.25 Timber stairways concession			X		Not applicable. Stairways are not expected to be timber.
<b>Part D3 - Access for People with Disabilities</b>					
D3.1 General building access requirements				X	<p>Access for people with disabilities in accordance with AS 1428.1-2009 is required:</p> <p>Class 5 - to and within all areas normally used by the occupants.</p> <p>Class 6 - to and within all areas normally used by the occupants.</p> <p>Class 7a - to and within any level containing accessible carparking (refer to BCA Clause D3.5).</p> <p>Class 7b - to and within all areas normally used by the occupants.</p> <p>Class 9b - To wheelchair seating spaces provided in accordance with D3.9. To and within all other areas normally used by the occupants.</p>

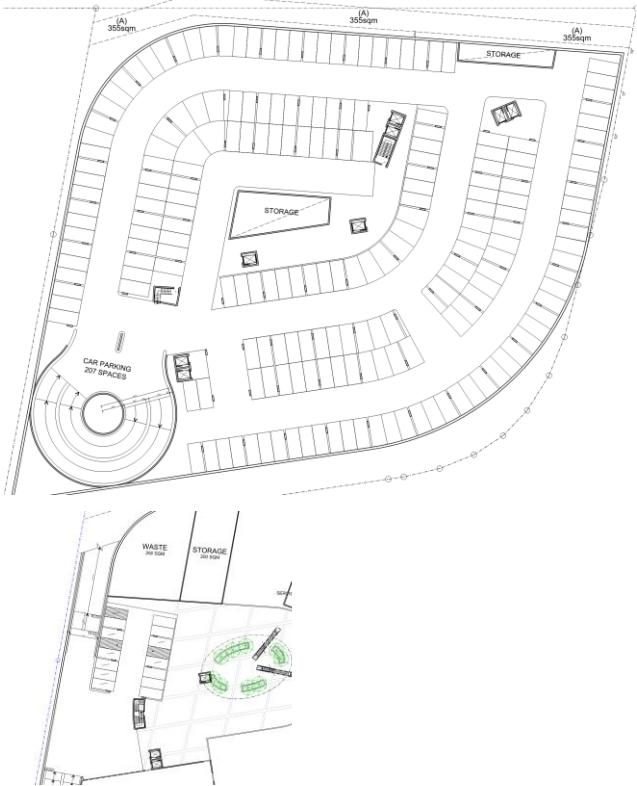


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D3.2 Access to buildings				X	<p>An AS 1428.1-2009 compliant accessway:</p> <ul style="list-style-type: none"> <li>❖ from the main points of a pedestrian entry at the allotment boundary; and</li> <li>❖ from any accessible residential carparking space on the allotment.</li> </ul> <p>In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and—</p> <ul style="list-style-type: none"> <li>❖ through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and</li> <li>❖ in a building with a total floor area more than 500 m<sup>2</sup>, a pedestrian entrance which is not accessible must not be located more than 50 m from an accessible pedestrian entrance,</li> </ul> <p><b>An AS 1428.1-2009 compliant accessway is required from the principal pedestrian entrance (red arrow) and through not less than 3 of the entrances from the street, including the principal pedestrian entrance. RLs of the podium slab suggest that no ramps are not required. Compliance is readily achievable.</b></p>  <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D3.3				X	In a building required to be accessible—



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Parts of the building required to be accessible					<p>(a) every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with—</p> <p>(i) for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and</p> <p>(ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and</p> <p>(iii) for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and</p> <p>(b) every passenger lift must comply with E3.6; and</p> <p>(c) accessways must have—</p> <p>(i) passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available; and</p> <p>(ii) turning spaces complying with AS 1428.1—</p> <p>(A) within 2 m of the end of accessways where it is not possible to continue travelling along the accessway; and</p> <p>(B) at maximum 20 m intervals along the accessway; and</p> <p>(d) an intersection of accessways satisfies the spatial requirements for a passing and turning space; and</p> <p>(e) a passing space may serve as a turning space; and</p> <p>(f) clause 7.4.1(a) of AS 1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm'; and</p> <p>(g) the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4 mm and 15 mm respectively.</p> <p><i>Note: BCA 2019 does not directly specify slip-resistance classification(s) for all accessible paths of travel; however, we highlight the need under AS 1428.1-2009 for all accessible paths of travel to have a slip-resistant surface. We recommend you should seek surface finish advice from an independent specialist slip safety consultant.</i></p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</b></p>
D3.4 Exemptions			X		Information relevant to parts of buildings that are not required to be accessible.
D3.5 Carparking				X	Accessible carparking spaces required in accordance with AS/NZS 2890.6-2009 is required to a carparking



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>area on the same allotment as a building required to be accessible.</p> <p>1 space for every 100 carparking spaces or part thereof.</p> <p><b>The carparking has 207 carparking spaces.</b></p> <p><b>Therefore 3 accessible carparking spaces are provided as required.</b></p>  <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
D3.6 Signage				X	<p>Braille and tactile signage complying with Specification D3.6 to identify:</p> <ul style="list-style-type: none"> <li>❖ sanitary facilities; and</li> <li>❖ a space with hearing augmentation; and</li> <li>❖ each door required by Clause E4.5 to be provided with an exit sign, inclusive of the requirement to state “EXIT” and “Level” followed by the floor level number on such doors.</li> </ul> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
D3.7 Hearing augmentation				X	<p>A hearing augmentation system where an inbuilt amplification system, other than one used for emergency warning, is installed in:</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> <li>❖ a room in a Class 9b building; and</li> <li>❖ an auditorium, conference room, meeting room or room for judicatory purposes; and</li> </ul> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D3.8 Tactile indicators				X	<p>Tactile ground surfaced indicators complying with AS/NZS 1428.4.1-2009 to:</p> <ul style="list-style-type: none"> <li>❖ a stairway, other than a fire-isolated stairway; and</li> <li>❖ a ramp, other than a fire-isolated ramp, step ramp, kerb ramp, or swimming pool ramp; and</li> <li>❖ warn of overhead obstructions; and</li> <li>❖ warn of an accessway that intersects with a vehicular way adjacent to any pedestrian entrance to a building.</li> </ul> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D3.9 Wheelchair seating spaces in Class 9b assembly buildings			X		Not applicable. No fixed seating is proposed in the Class 9b part.
D3.10 Swimming Pools			X		Not applicable. No swimming pool
D3.11 Ramps			X		<p>On an accessway—</p> <ul style="list-style-type: none"> <li>(a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and</li> <li>(b) a landing for a step ramp must not overlap a landing for another step ramp or ramp</li> </ul> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
D3.12 Glazing on an accessway			X		<p>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 AS 1428.1.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<b>SECTION E SERVICES &amp; EQUIPMENT</b>					
Part E1 - Fire Fighting Equipment					
E1.3 Fire Hydrants		X			(a) A hydrant system must be provided to serve a building –





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> <li>(i) Having a total floor area greater than 500m<sup>2</sup>; and</li> <li>(ii) Where a fire brigade station is –               <ul style="list-style-type: none"> <li>(A) No more than 50 km from the building as measured along roads; and</li> <li>(B) Equipped with equipment capable of utilising a fire hydrant.</li> </ul> </li> <li>(b) The fire hydrant system-               <ul style="list-style-type: none"> <li>(i) Must be installed in accordance with AS2419.1, except –                   <ul style="list-style-type: none"> <li>(C) Where a sprinkler system is installed throughout a building in accordance with AS 2118.1, AS 2118.4, AS 2118.6, FPAA101H or FPAA101D the fire hydrant booster protection requirements of Clause 7.3(c)(ii) and 7.3(d)(iii) of AS 2419.1 do not apply, and</li> <li>(D) A fire hydrant booster assembly may be located between 3.5m and 10m of the building, and need not comply with Clause 7.3(d)(iii) of AS 2419.1 where the assembly is protected by an adjacent fire rated freestanding wall that –                       <ul style="list-style-type: none"> <li>(cc) achieves an FRL of not less than 90/90/90; and</li> <li>(dd) extends not less than 1m each side of the outermost fire hydrant booster risers within the assembly and is not less than 3m wide; and</li> <li>(ee) extends to a height of not less than 2m above finished ground level; and</li> </ul> </li> </ul> </li> <li>(ii) Where internal fire hydrants are provided, they must serve only the storey on which they are located</li> </ul> <p><b>The following details are required to be detailed on the CC plans:</b></p> <ol style="list-style-type: none"> <li>1. Hydrant booster assembly;</li> <li>2. Pump room</li> </ol> <p><b><i>Hydraulic Services Design Certification and associated plans must be incorporated into the construction certificate specification</i></b></p> </li></ul>
E1.4 Fire Hose Reels		X			<ul style="list-style-type: none"> <li>(a) E1.4 does not apply to –               <ul style="list-style-type: none"> <li>(i) A 5 building; or</li> </ul> </li> <li>(b) A fire hose reel system must be provided –               <ul style="list-style-type: none"> <li>(i) to serve the whole building where one or more internal fire hydrants area installed; or</li> </ul> </li> </ul>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> <li>(ii) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500m<sup>2</sup>.</li> <li>(c) The fire hose reel system must –               <ul style="list-style-type: none"> <li>(i) Have hose reels installed in accordance with AS 2441; and</li> <li>(ii) Provide hose reels to serve only the storey in which they are located except a sole occupancy unit of not more than 2 storeys in a Class 6, 7, 8 and 9 building may be served by a single fire hose reel located at the level of egress from that sole occupancy unit provided the fire hose reel can provide coverage to the whole of the sole occupancy unit.</li> </ul> </li> <li>(d) Fire hose reels must be located internally, externally or in combination, to achieve the system coverage as specified in AS2441.</li> <li>(e) In achieving system coverage, one or a combination of the following criteria for individual internally located fire hose reels must be met in determining the layout of any fire hose reel system:               <ul style="list-style-type: none"> <li>(i) Fire hose reels must be located adjacent to an internal hydrant (other than one in a fire isolated exit). Except that a fire hose reel need not be located adjacent to every fire hydrant, provided system coverage can be achieved.</li> <li>(ii) Fire hose reels must be located within 4m of an exit, except that a fire hose reel need not be located adjacent to every exit, provided system coverage can be achieved.</li> <li>(iii) Where system coverage is not achieved by compliance with (i) and (ii), additional fire hose reels may be located in paths of travel to an exit to achieve the required coverage.</li> </ul> </li> <li>(f) Fire hose reels must be located so that the fire hose will not pass through doorways fitted with fire or smoke doors, except               <ul style="list-style-type: none"> <li>(i) Doorways in walls referred to in C2.12 or C2.13 separating equipment or electrical supply systems; and</li> <li>(ii) Doorways opening into shafts referred to in C3.13.</li> </ul> </li> <li>(g) Where the normal water supply cannot achieve the flow and pressures required by AS 2441, or is unreliable –</li> <li>(h) A pump; or</li> <li>(i) Water storage facility; or</li> </ul>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(j) Both a pump and water storage facility, Must be installed to provide the minimum floor and pressures required by clause 6.1 of AS 2441.</p> <p><b>The following details are required to be detailed on the CC plans:</b></p> <p><b>3. Location of the Fire hose reels throughout the building.</b></p> <p><b><i>Hydraulic Services Design Certification and associated plans must be incorporated into the construction certificate specification</i></b></p>
E1.5 Sprinklers		X			<p>A sprinkler system must -</p> <p>(a) Be installed in a building or part of a building when required by Table E1.5; and</p> <p>(b) Comply with Specification E1.5 and Specification E1.5a as applicable as summarised below –</p> <ul style="list-style-type: none"> <li>❖ All Classes - Throughout the whole building if any part of the building has an effective height of more than 25m</li> <li>❖ Class 6 - fire compartments that exceed a floor area of 3,500m<sup>2</sup> or volume of more than 21,000m<sup>3</sup>.</li> <li>❖ Class 7a carpark (other than open deck) – in fire compartments that accommodate more than 40 vehicles.</li> <li>❖ Class 9b theatres, stages and public halls (refer Part H1);</li> <li>❖ Atrium construction (refer Part G3);</li> <li>❖ Large isolated buildings (refer clause C2.3);</li> </ul> <p><b>The building is required to be provided with a sprinkler system to satisfy the large isolated building provision C2.3 and the Class 7a carpark accommodates more than 40 vehicles.</b></p> <p><b>The following details are required to be detailed on the CC plans:</b></p> <p><b>4. Location of the sprinkler pump room</b></p> <p><b>5. Location of the sprinkler valve enclosure.</b></p> <p><b><i>Hydraulic Services Design Certification must be incorporated into the construction certificate specification</i></b></p>
E1.6 Portable Fire Extinguishers				X	<p>(a) Portable fire extinguishers must be –</p> <p>(i) Provided as listed in Table E1.6;</p> <p>(ii) For a Class 5 building provided –</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(A) To serve the whole Class 5 building where one or more internal fire hydrants are installed; or</p> <p>(B) Where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500m<sup>2</sup>, and for the purpose of this clause, a sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building is considered to be a fire compartment; and</p> <p>(iii) Subject (b), selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444.</p> <p><b>The following details are required to be detailed on the CC plans:</b></p> <p><b>6. Location of the PFE's</b></p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
E1.8 Fire Control Centre				X	<p>A fire control centre complying with Specification E1.8 must be provided for Class 6, 7 or 9 building with a total floor area of more than 18,000m<sup>2</sup>.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
E1.9 Fire Precautions during construction				X	<p>In a building under construction –</p> <p>(a) not less than one portable fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required / temporary exit; and</p> <p>(b) After the building has reach an effective height of 12m –</p> <p>(i) the required fire hydrants and fire hose reels must be operational on all floor / roof covered storeys, except for the 2 uppermost storeys; and</p> <p>(ii) Any required booster connections must be installed.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
E1.10 Provision for Special Hazards			X		<p>Suitable additional provisions must be made if special problems of firefighting could arise because</p> <p>(a) of the nature or quantity of materials stored, displayed or used in a building or on the allotment; or</p> <p>(b) The location of the building in relation to a water supply for fire-fighting purposes.</p>





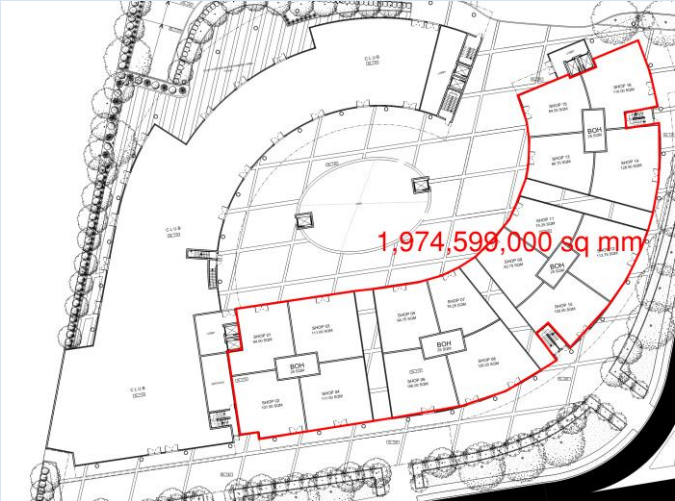
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
Part E2 Smoke Hazard Management					
E2.2 General Requirements (inclusive of Table E2.2a / Table E2.2b & NSW amendments)				X	<p><b><u>General smoke hazard management requirements</u></b></p> <p>(a) A building must comply with Table E2.2a as applicable to Class 2 to 9 buildings and Table E2.2b as applicable to Class 6 and 9b buildings such that each separate part complies with the relevant provisions for the classification.</p> <p>(b) An air-handling system which does not form part of a smoke hazard management system in accordance with Table E2.2a or Table E2.2b and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment (such as lobby air supply) must—</p> <p>(i) (i) be designed and installed to operate as a smoke control system in accordance with AS/NZS 1668.1; or</p> <p>(ii)</p> <p>(A) incorporate smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and</p> <p>(B) be arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1;</p> <p>and for the purposes of this provision, each sole-occupancy unit in a Class 2 or 3 building is treated as a separate fire compartment.</p> <p>(c) Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with the Section of the Standard.</p> <p>(d) A smoke detection system must be installed in accordance with Clause 6 of Specification E2.2a to operate AS 1668.1 systems that are provided for zone pressurisation and automatic air pressurisation for fire isolated exits.</p> <p><b><u>Class 5, 6, 7b &amp; 9b parts</u></b></p> <p><b>The building is required to be provided with a sprinkler system to satisfy the large isolated</b></p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>building provisions and therefore the smoke hazard management provisions are compliant.</p> <p><b><u>Large isolated building subject to C2.3</u></b></p> <p>In a Class 5, 6, 7 or 9 building, which exceeds 18 000 m<sup>2</sup> in floor area or 108 000 m<sup>3</sup> in volume, (subject building has a floor area of 20,000m<sup>2</sup> the building must be provided with—</p> <p>(i) if the ceiling height of the fire compartment is not more than 12 m—</p> <p>(A) an automatic smoke exhaust system in accordance with Specification E2.2b; or</p> <p>(B) automatic smoke-and-heat vents in accordance with Specification E2.2c; or</p> <p>(ii) if the ceiling height of the fire compartment is more than 12 m, an automatic smoke exhaust system in accordance with Specification E2.2b.</p> <p><b><u>Class 7a (carpark)</u></b></p> <p>A Class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2 must comply with clause 5.5 of AS/NZS 1668.1 except that—</p> <p>(a) fans with metal blades suitable for operation at normal temperature may be used; and</p> <p>(b) the electrical power and control cabling need not be fire rated</p> <p><b><u>Class 9b (club)</u></b></p> <p>Automatic shutdown:</p> <p>A building or part of a building used as an assembly building must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 l/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 11 of AS/NZS 1668.1) which does not form part of the smoke hazard management system, on the activation of—</p> <p>(i) smoke detectors installed complying with Clause 5 of Specification E2.2a; and</p> <p>(ii) any other installed fire detection and alarm system, including a sprinkler system complying with Specification E1.5.</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p><b>Class 6 part</b></p> <p>The provisions of Table E2.2b do not apply as the floor area is less than 2000m<sup>2</sup> and the Class 6 SOU is located opening to the road.</p> <p>The Class 6 parts must be separated from other parts of the fire compartment by construction, including openings, penetrations and junctions with other building elements, that prevents the free passage of smoke.</p>  <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>
E2.3 Provision for Special Hazards			X		Not applicable. Not a special hazard.
<b>Part E3 - Lift Installations</b>					
E3.1 Lift installations				X	<p>An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification E3.1</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
E3.2 Stretcher Facility in Lifts				X	<p>(a) A stretcher facility in accordance with (b) must be provided—</p> <ul style="list-style-type: none"> <li>(i) in at least one emergency lift required by E3.4; or</li> <li>(ii) where an emergency lift is not required, if passenger lifts are installed to serve any storey above an effective height of 12 m, in at least one of those lifts to serve each floor served by the lifts.</li> </ul> <p>(b) A stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600 mm wide</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					<p>x 2000 mm long x 1400 mm high above the floor level.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
E3.3 Warning Against the use of lifts in Fire				X	<p>Warning signs indicating “<b>DO NOT USE LIFTS IF THERE IS A FIRE</b>” shall be displayed near every call button for a passenger lift or group of lifts throughout a building as per E3.3.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
E3.4 Emergency Lifts			X		Not applicable. Effective height <25m.
E3.5 Landings				X	<p>Access and egress to and from lift-well landings must comply with the Deemed-to-Satisfy Provisions of Section D.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
E3.6 Facilities for People with Disabilities				X	<p>In an accessible building, every passenger lift must be one of the types specified in Table E3.6a, 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.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
E3.7 Fire Service Controls				X	<p>Lifts serving any storey above an effective height of 12m must be provided with a:</p> <ul style="list-style-type: none"> <li>(a) fire service recall control switch complying with E3.9 (for a group of lifts or a single lift not in a group that serves the storey); and</li> <li>(b) lift car fire drive control switch complying with E3.10 for every lift.</li> </ul> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
E3.8 Residential Care Buildings			X		<p>Where residents in a Class 9c residential care building are on levels which do not have direct access to a road or open space, the building must be provided with either:</p> <ul style="list-style-type: none"> <li>(a) at least one lift that can accommodate a stretcher; or</li> <li>(b) a ramp in accordance with AS 1428.1-2009.</li> </ul> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
E3.9 Fire service recall operation switch				X	Information relevant to specific fire service recall control switch requirements.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
E3.10 Lift car fire service drive control switch				X	Information relevant to specific lift car fire service drive control switch requirements.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
Part E4 - Visibility in an Emergency, Exit signs and Warning Systems					
E4.2 Emergency Lighting Requirements				X	Emergency lighting must be provided throughout the building relevant to the requirements of this clause.  <b><i>Electrical Design Certification must be incorporated into the construction certificate specification</i></b>
E4.3 Measurement of Distance			X		Distances, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.
E4.4 Design and Operation of Emergency Lighting			X		The emergency lighting system must comply with AS/NZS 2293.1-2005.
E4.5 Exit Signs				X	An exit sign must be clearly visible to persons approaching the exit, and must be installed on, above or adjacent to each—  (a) door providing direct egress from a storey to— (i) an enclosed stairway, passageway or ramp serving as a required exit; and (ii) an external stairway, passageway or ramp serving as a required exit; and (iii) an external access balcony leading to a required exit; and  (b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and  (c) horizontal exit; and  (d) door serving as, or forming part of, a required exit in a storey required to be provided with emergency lighting in accordance with E4.2.  <b><i>Electrical design plans and certification must be incorporated into the construction certificate specification</i></b>
E4.6 Direction Signs (inclusive of NSW E4.6)				X	<u>Where</u> an exit is not readily apparent to persons occupying or visiting the building then directional exit signs must be installed in appropriate positions.  <b><i>Electrical Design Certification must be incorporated into the construction certificate specification and</i></b>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					<b><i>directional exit sign locations must be illustrated on the architectural floor plans</i></b>
E4.7 Class 2 & 3 Buildings & Class 4 Parts: Exemption			X		Not applicable. Not a Class 2, 3 and 4 building.
E4.8 Design & Operation of Exit Signs				X	Exit signs must comply with: (a) AS/NZS 2293.1-2005; or (b) For a photoluminescent exit sign, Specification E4.8.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
E4.9 Emergency Warning & Intercom Systems			X		Not applicable. An emergency warning and intercom system is not required.  The Class 9b building is not used as a, <u>public hall</u> , or the like, having a floor area more than 1000 m <sup>2</sup> or a rise in storeys of more than 2.
<b>SECTION F</b>					
<b>HEALTH &amp; AMENITY</b>					
Part F1 - Damp & Weatherproofing					
F1.0 Deemed -to-Satisfy Provisions			X		Performance Requirements FP1.4, for the prevention of the penetration of water through external wall, must be complied.  There are no Deemed -to Satisfy Provisions for this Performance Solution in respect to external walls.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
F1.1 Stormwater Drainage				X	Stormwater drainage must comply with AS/NZS 3500.3-2015.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
F1.4 External above ground membranes				X	Any external above ground membranes must be waterproofed as per AS 4654 Parts 1 and 2-2012.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
F1.5 Roof coverings				X	A roof must be covered with— (a) concrete roofing tiles complying with AS 2049 and fixed, except in cyclonic areas, in accordance with AS 2050, as appropriate; or (b) terracotta roofing tiles complying with AS 2049 and fixed, except in cyclonic areas, in accordance with AS 2050; or





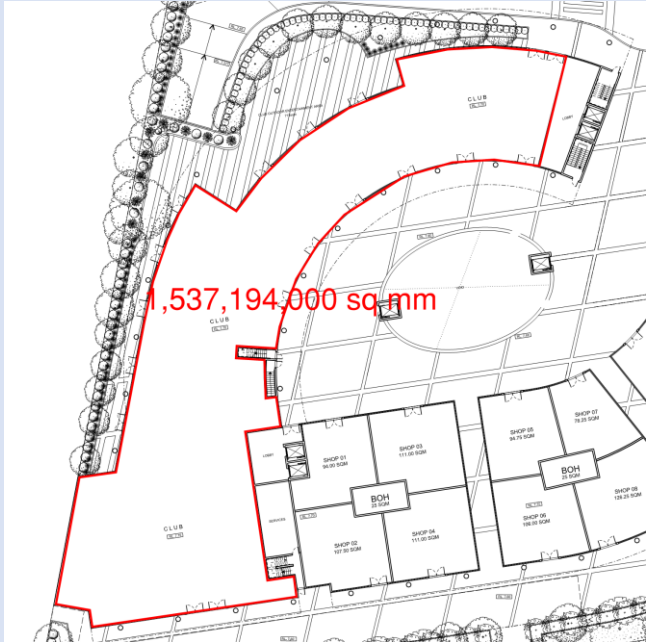
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					<p>(c) cellulose cement corrugated sheeting complying with AS/NZS 2908.1 and installed in accordance with AS/NZS 1562.2; or</p> <p>(d) metal sheet roofing complying with AS 1562.1; or</p> <p>(e) plastic sheet roofing designed and installed in accordance with AS/NZS 4256 Parts 1, 2, 3 and 5 and AS/NZS 1562.3; or</p> <p>(f) Terracotta, fibre-cement and timber slates and shingles designed and installed to complying with AS 4597 except in cyclonic areas</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
F1.6 Sarking				X	<p>Sarking-type materials used for weatherproofing must comply with AS/NZS 4200.1 and AS 4200.2.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
F1.7 Waterproofing of wet area				X	<p>Wet areas must be waterproofed in accordance with AS 3740-2010 and F1.7 &amp; Table F1.7 of the BCA.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
F1.9 Damp-proofing				X	<p>Where a damp-proof course is required, it must consist of a material that complies with AS/NZS 2904-1995; or impervious sheet material in accordance with AS 3660.1-2000</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
F1.10 Damp-proofing of floors on the ground				X	<p>If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870-2011 (N/A to areas that do not require weatherproofing – refer specific clause exemptions).</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
F1.11 Provision of Floor Wastes				X	<p>Bathrooms and laundries in Class 2, 3 or 4 buildings must be provided with a floor waste, and the floor of such areas must be graded to such floor waste.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
F1.12 Sub Floor Ventilation			X		<p>Information relevant to the ventilation of sub-floor spaces located between a suspended floor of a building and the ground.</p>

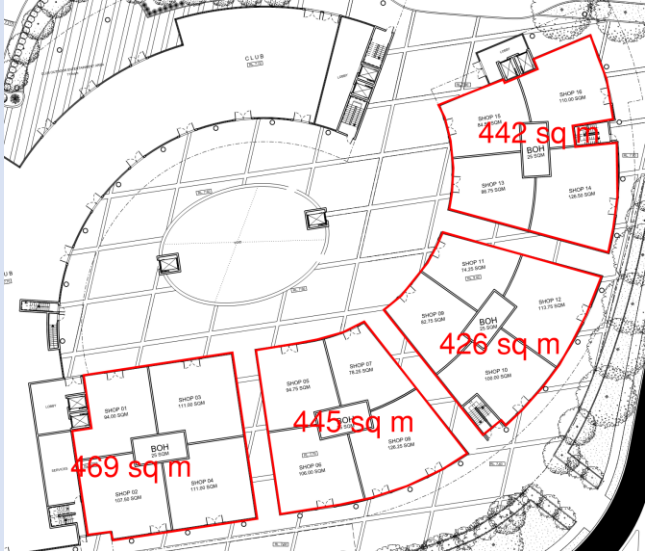


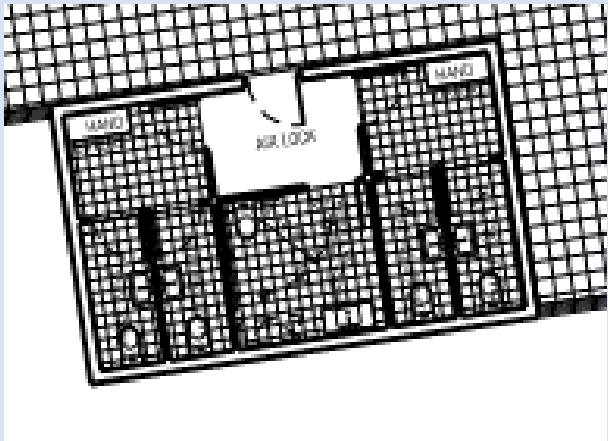


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					<b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b>
F1.13 Glazed Assemblies				X	Information relevant to the provision of glazed assemblies within external walls in accordance with AS 2047-1999.  <b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b>
<b>Part F2 - Sanitary &amp; Other Facilities</b>					
F2.1 Facilities in residential buildings				X	Information detailing the minimum sanitary facilities required in Class 2, 3, 4 and 9c aged care residential buildings.  <b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b>
F2.2 Calculation of number of occupants and fixtures			X		Informational clause.  ❖ The number of persons accommodated must be calculated according to D1.13 if it cannot be more accurately determined by other means.  ❖ Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females.  ❖ 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.  ❖ For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary towels.
F2.3 Facilities for Class 3 to 9 Buildings		X			(a) Except where permitted by (b), (c), (f), F2.4(a) and F2.4(b), separate sanitary facilities for males and females must be provided for Class 3, 5, 6, 7, 8 or 9 buildings in accordance with Table F2.3.  (b) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex.  (c) If the majority of employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy.  (d) Employees and the public may share the same facilities in a Class 6 and 9b building (other than a school or early childhood centre) provided the number of facilities provided is not less than the total number of facilities required for employees plus those required for the public.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(e) Adequate means of disposal of sanitary towels must be provided in sanitary facilities for use by females.</p> <p><b>DTS non-compliance</b></p> <ul style="list-style-type: none"> <li> <b>Basement 1 – Shopping centre</b>  Occupant Numbers = 600 people  Table F2.3 states “Sanitary facilities need not be provided if the total number of persons accommodated in the building is not more than 600.  <b>Details on the proposed number of employees is required to assess the required number of sanitary facilities.</b> </li> <li> <b>Ground Floor – Club</b>  <b>Details on the proposed number of occupants is required to assess the required number of sanitary facilities.</b>  Based on D1.13 Bar requires 1m2 per person.  Therefore 1,537 is the expected population. Please note this is based on the floor area of the shell and therefore the occupant numbers will be greatly reduced. The number of sanitary facilities is required to be addressed at this stage. </li> </ul>  <ul style="list-style-type: none"> <li> <b>Ground Floor – Shops.</b>  Total floor area = 1,782m<sup>2</sup>  D1.13 = 3m<sup>2</sup> per person </li> </ul>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																																
					<p>Occupant Numbers = 594 people</p> <p>Table F2.3 states , shopping centre, “Sanitary facilities need not be provided if the total number of persons accommodated in the building is not more than 600.</p> <p><b>Details on the proposed number of employees is required to assess the required number of sanitary facilities.</b></p>  <ul style="list-style-type: none"> <li><b>Level 1 &amp; 2 – Commercial</b></li> </ul> <p>Under BCA Clause D1.13 a “office” (closest use in D1.13) details that 10m<sup>2</sup> per person. Therefore, the population of the “Commercial” would be 223 (south) &amp; 115 people (north).</p> <p>Total population = 338</p> <table border="1" data-bbox="842 1476 1517 1729"> <thead> <tr> <th>Required</th> <th>CP</th> <th>U</th> <th>WB</th> </tr> </thead> <tbody> <tr> <td>Male – 169</td> <td>9</td> <td>5</td> <td>6</td> </tr> <tr> <td>Female – 169</td> <td>12</td> <td>-</td> <td>6</td> </tr> <tr> <td>Unisex accessible</td> <td colspan="3">1</td> </tr> </tbody> </table> <table border="1" data-bbox="842 1778 1517 2031"> <thead> <tr> <th>Provided</th> <th>CP</th> <th>U</th> <th>WB</th> </tr> </thead> <tbody> <tr> <td>Male – 169</td> <td>2</td> <td>0</td> <td>2</td> </tr> <tr> <td>Female – 169</td> <td>2</td> <td>-</td> <td>2</td> </tr> <tr> <td>Unisex accessible</td> <td colspan="3">1</td> </tr> </tbody> </table>	Required	CP	U	WB	Male – 169	9	5	6	Female – 169	12	-	6	Unisex accessible	1			Provided	CP	U	WB	Male – 169	2	0	2	Female – 169	2	-	2	Unisex accessible	1		
Required	CP	U	WB																																		
Male – 169	9	5	6																																		
Female – 169	12	-	6																																		
Unisex accessible	1																																				
Provided	CP	U	WB																																		
Male – 169	2	0	2																																		
Female – 169	2	-	2																																		
Unisex accessible	1																																				

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																																												
					<p>Therefore, the following additional sanitary facilities are required.</p> <table border="1" data-bbox="842 443 1517 667"> <thead> <tr> <th>Provided</th> <th>CP</th> <th>U</th> <th>WB</th> </tr> </thead> <tbody> <tr> <td>Male</td> <td>7</td> <td>5</td> <td>4</td> </tr> <tr> <td>Female</td> <td>10</td> <td>-</td> <td>4</td> </tr> <tr> <td>Unisex accessible</td> <td colspan="3">0</td> </tr> </tbody> </table>  <ul style="list-style-type: none"> <li><b>Rooftop – Entertainment area</b></li> </ul> <p>Under BCA Clause D1.13 a “public hall” (closest use in D1.13) details that 1m<sup>2</sup> per person. Therefore, the population of the “Rooftop Entertainment Area” would be 622 people.</p> <p>F2.3 assessment for required sanitary compartment numbers for Class 9b – public hall, function rooms</p> <table border="1" data-bbox="842 1525 1517 1778"> <thead> <tr> <th>Required</th> <th>CP</th> <th>U</th> <th>WB</th> </tr> </thead> <tbody> <tr> <td>Male – 311</td> <td>3</td> <td>6</td> <td>3</td> </tr> <tr> <td>Female – 311</td> <td>7</td> <td>-</td> <td>3</td> </tr> <tr> <td>Unisex accessible</td> <td colspan="3">1</td> </tr> </tbody> </table> <table border="1" data-bbox="842 1823 1517 1998"> <thead> <tr> <th>Provided</th> <th>CP</th> <th>U</th> <th>WB</th> </tr> </thead> <tbody> <tr> <td>Male – 600</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Female – 600</td> <td>0</td> <td>-</td> <td>0</td> </tr> </tbody> </table>	Provided	CP	U	WB	Male	7	5	4	Female	10	-	4	Unisex accessible	0			Required	CP	U	WB	Male – 311	3	6	3	Female – 311	7	-	3	Unisex accessible	1			Provided	CP	U	WB	Male – 600	0	0	0	Female – 600	0	-	0
Provided	CP	U	WB																																														
Male	7	5	4																																														
Female	10	-	4																																														
Unisex accessible	0																																																
Required	CP	U	WB																																														
Male – 311	3	6	3																																														
Female – 311	7	-	3																																														
Unisex accessible	1																																																
Provided	CP	U	WB																																														
Male – 600	0	0	0																																														
Female – 600	0	-	0																																														



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																		
					<table border="1" style="width: 100%;"> <tr> <td style="width: 30%;">Unisex accessible</td> <td style="text-align: center;">0</td> </tr> </table> <p><b>Therefore, the following additional sanitary facilities are required.</b></p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 30%;">Required</th> <th style="width: 15%;">CP</th> <th style="width: 15%;">U</th> <th style="width: 15%;">WB</th> </tr> </thead> <tbody> <tr> <td>Male – 600</td> <td style="text-align: center;">3</td> <td style="text-align: center;">6</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Female – 600</td> <td style="text-align: center;">7</td> <td style="text-align: center;">-</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Unisex accessible</td> <td colspan="3" style="text-align: center;">1</td> </tr> </tbody> </table>	Unisex accessible	0	Required	CP	U	WB	Male – 600	3	6	3	Female – 600	7	-	3	Unisex accessible	1		
Unisex accessible	0																						
Required	CP	U	WB																				
Male – 600	3	6	3																				
Female – 600	7	-	3																				
Unisex accessible	1																						
<p>F2.4 Facilities for People with Disabilities</p>		X			<p>In a building required to be accessible— SA F2.4(a)</p> <ul style="list-style-type: none"> <li>(a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a); and</li> <li>(b) accessible unisex showers must be provided in accordance with Table F2.4(b); and</li> <li>(c) at each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females; and</li> <li>(d) an accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels; and</li> <li>(e) the circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with Table F2.4(a) and Table F2.4(b) must comply with the requirements of AS 1428.1; and</li> <li>(f) an accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and</li> <li>(g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and</li> <li>(h) where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations; and</li> <li>(i) an accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey or level that is not required by D3.3(f) to</li> </ul>																		





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>be provided with a passenger lift or ramp complying with AS 1428.1.</p> <p><b><u>DTS non-compliance</u></b></p> <p><b>Accessible sanitary compartments are required in</b></p> <ul style="list-style-type: none"> <li>• 1 on every storey containing sanitary compartments and</li> <li>• Where a storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks.</li> </ul> <p><b>Once sanitary facilities are provided to satisfy BCA Clause F2.3, the accessible sanitary compartments and ambulant sanitary compartments are required to comply with AS 1428.1-2009.</b></p>
<p>F2.5 Construction of Sanitary Compartments</p>				X	<p>Sanitary compartments must have:</p> <p>(a) Doors and partitions that separate adjacent compartments; and</p> <p>(b) the door to a fully enclosed sanitary compartment must open outwards, or slide, or be removable from outside of the compartment, unless there is a clear space of at least 1.2m between the closet pan within the compartment and the doorway.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
<p>F2.6 Interpretation: Urinals and washbasins</p>			X		<p>Information relevant to urinal and washbasin design.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
<p>F2.7 Microbial Control Note NSW F2.7 (Clause Deleted)</p>			X		<p>N/A Clause Deleted in NSW.</p>
<p>F2.8 Waste Management</p>					<p>Information relevant to requirements for Class 9a &amp; 9c.</p>
<p>F2.9 Accessible adult change facilities</p>			X		<p>Not applicable.</p> <p>Ground Flor Class 6 Occupant Numbers = 594 people</p>
<p>Part F3 Room Sizes</p>					
<p>F3.1 Height of Rooms and other spaces</p>				X	<p>The ceiling height must be not less than—</p> <p>(c) in a Class 5, 6, 7 or 8 building—</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> <li>(i) except as allowed in (ii) and (f) — 2.4 m; and</li> <li>(ii) a corridor, passageway, or the like — 2.1 m; and</li> <li>(d) in a Class 9b building—               <ul style="list-style-type: none"> <li>(i) a school classroom or other assembly building or part that accommodates not more than 100 persons — 2.4 m; and</li> <li>(ii) a theatre, public hall or other assembly building or part that accommodates more than 100 persons — 2.7 m; and</li> <li>(iii) a corridor—                   <ul style="list-style-type: none"> <li>(A) that serves an assembly building or part that accommodates not more than 100 persons — 2.4 m; or</li> <li>(B) that serves an assembly building or part that accommodates more than 100 persons — 2.7 m; and</li> </ul> </li> <li>(iv) the number of persons accommodated must be calculated according to D1.13; and</li> </ul> </li> <li>(e) In any building—               <ul style="list-style-type: none"> <li>(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</li> <li>(ii) a commercial kitchen &amp; required accessible change room facility — 2.4 m; and</li> <li>(iii) above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like.</li> </ul> </li> </ul>
<b>Part F4 - Light &amp; Ventilation</b>					
F4.1 Provision of natural light			X		Not applicable. Not a class 2, 3 or 9b building proposed as a childcare
F4.2 Methods and extent of natural lighting			X		Not applicable.
F4.3 Natural light borrowed from adjoining room			X		Not applicable.
F4.4 Artificial lighting				X	Artificial lighting in accordance with AS/NZS 1680.0-2009 to specific building areas. <b><i>Electrical Design Certification must be incorporated into the construction certificate specification</i></b>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
F4.5 Ventilation of Rooms				X	<p>All rooms to be provided with Clause F4.6 compliant natural ventilation <b>OR</b> a mechanical ventilation or air-conditioning system complying with AS 1668.2-2012.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
F4.6 Natural Ventilation			X		<p>(a) Natural ventilation provided in accordance with F4.5(a) must consist of permanent openings, windows, doors or other devices which can be opened—</p> <ul style="list-style-type: none"> <li>(i) with ventilating area not less than 5% of the floor area of the room required to be ventilated; and</li> <li>(ii) open to— <ul style="list-style-type: none"> <li>(A) a suitably sized court, or space open to the sky; or</li> <li>(B) an open verandah, carport, or the like; or</li> <li>(C) an adjoining room in accordance with F4.7.</li> </ul> </li> </ul> <p>(b) The requirements of (a)(i) do not apply to a Class 8 electricity network substation.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
F4.7 Ventilation borrowed from adjoining room			X		<p>Natural ventilation to a room may come through a window, opening, ventilating door or other device from an adjoining room (including an enclosed verandah) if both rooms are within the same sole-occupancy unit or the enclosed verandah is common property, and—</p> <ul style="list-style-type: none"> <li>(a) in a Class 2 building, a sole-occupancy unit of a Class 3 building or Class 4 part of a building— <ul style="list-style-type: none"> <li>(i) the room to be ventilated is not a sanitary compartment; and</li> <li>(ii) the window, opening, door or other device has a ventilating area of not less than 5% of the floor area of the room to be ventilated; and</li> <li>(iii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 5% of the combined floor areas of both rooms; and</li> </ul> </li> <li>(b) in a Class 5, 6, 7, 8 (except a Class 8 electricity network substation) or 9 building— <ul style="list-style-type: none"> <li>(i) the window, opening, door or other device has a ventilating area of not less than 10% of the floor area of the room to be ventilated, measured not more than 3.6 m above the floor; and</li> </ul> </li> </ul>





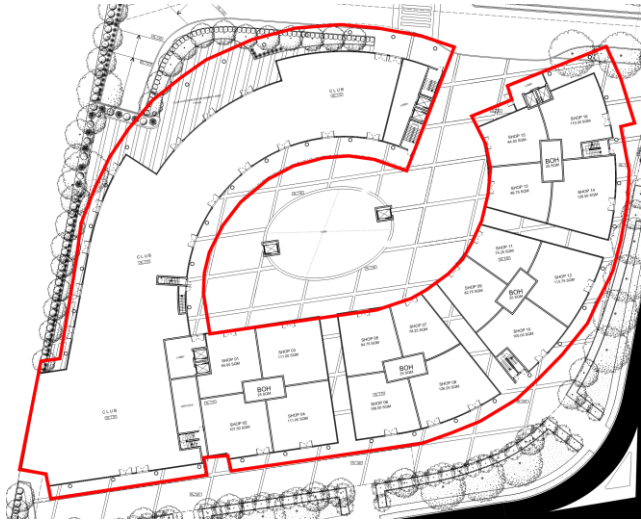
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(ii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 10% of the combined floor areas of both rooms; and</p> <p>(c) the ventilating areas specified in (a) and (b) may be reduced as appropriate if direct natural ventilation is provided from another source.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<p>F4.8 Restriction of position of water closets and urinals</p>			X		<p>Rooms containing closet pans or urinals must not open directly into kitchen / pantry areas, public dining areas, , public assembly areas (excluding early childhood centres, primary schools and open spectator stands) and a workplace normally occupied by more than one person.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<p>F4.9 Airlocks</p>				X	<p>Information relevant to the provision of airlocks and the like to separate rooms prohibited under Clause F4.8 from opening directly into another room.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<p>F4.11 Carparks</p>				X	<p>Every storey of a carpark (except an open deck carpark) must have:</p> <p>(a) a system of mechanical ventilation complying with AS1668.2-2012; or</p> <p>(b) a system of natural ventilation complying with Section 4 of AS 1668.4-2012.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<p>F4.12 Kitchen local exhaust</p>			X		<p>Kitchen exhaust hood complying with AS/NZS 1668.1-2015 and AS 1668.2-2012 for commercial kitchens.</p> <p><b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b></p>
<b>Part F5 - Sound Transmission</b>					
<p>F5.1 Application of Part</p>			X		<p>Not applicable. Not a Class 2, 3 and 9c buildings only.</p>
<p>F5.2 Determination of airborne sound insulation ratings</p>			X		<p>Not applicable. Not a Class 2, 3 and 9c buildings only.</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
F5.3 Determination of impact sound insulation ratings			X		Not applicable. Not a Class 2, 3 and 9c buildings only.
F5.4 Sound Insulation of floors between units			X		Not applicable. Not a Class 2, 3 and 9c buildings only.
F5.5 Sound insulation of walls between units			X		Not applicable. Not a Class 2, 3 and 9c buildings only.
F5.6 Sound insulation rating of services			X		Not applicable. Not a Class 2, 3 and 9c buildings only.
F5.7 Sound isolation of pumps			X		Not applicable. Not a Class 2, 3 and 9c buildings only.
<b>Part F6 – Condensation Management</b>					
F6.1 Application of Part			X		Not applicable. Not a Class 2, 3 and 4 building.
F6.2 Pliable building membrane			X		Not applicable. Not a Class 2, 3 and 4 building.
F6.3 Flow rate and discharge of exhaust systems			X		Not applicable. Not a Class 2, 3 and 4 building.
F6.4 Ventilation of roof spaces			X		Not applicable. Not a Class 2, 3 and 4 building.
<b>SECTION G ANCILLIARY PROVISIONS</b>					
<b>Part G1 - Minor Structures and Components</b>					
G1.1 Swimming Pools			X		Not applicable. No swimming pool
NSW G1.101 Provision for cleaning windows				X	<p>A safe manner for cleaning of windows located 3 or more storeys above ground level must be provided, and compliance is achieved where:</p> <p>(a) The windows can be cleaned wholly from within the building; or</p> <p>(b) Via a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
G1.2 Refrigeration chambers, strong-					A refrigerated or cooling chamber of sufficient size for a person to enter must incorporate the safety requirements of this clause relevant to an internal



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
rooms and vaults					latching device, internal lighting, external lamp indicator and alarm bell features.  <b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b>
G1.3 Outdoor play areas			X		Not applicable.
Part G2 - Boilers, Pressure Vessels, Heating Appliances, Fireplaces, Chimneys and Flues					
Part G3 - Atrium Construction					
G3.1 Application of part			X		Not considered an atrium as the roof does not enclose more than 50% of the area of the space.  
Part G4 - Construction in Alpine Areas					
Part G5 - Construction in Bushfire Prone Areas					
Part G6 - Occupiable Outdoor Areas					
G6.1 Application of Part				X	The DTS provisions of this part apply to buildings containing an outdoor area in addition to the other DTS provisions of the BCA. It does not apply to such areas within a sole occupancy unit.  <i>Note – occupiable outdoor area is a defined as a space on a roof, balcony, or similar part of a building that is open to the sky; and to which access is provided, other than access only for maintenance; and that is not open space or directly connected to open space.</i>
G6.2 Fire hazard properties				X	(a) A lining, material or assembly in an occupiable 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 are not required to comply with C1.10:  (i) Average specific extinction area.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					(ii) Smoke-development Index. (iii) Smoke development rate. (c) Smoke growth rate index. <b>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</b>
G6.3 Fire separation				X	For the purposes of DTS 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 area into different fire compartments.
G6.4 Provision for escape				X	For the purposes of the DTS provisions of Part D1, a reference to a storey or room includes an occupiable outdoor area.
G6.5 Construction of exits				X	For the purposes of the DTS provisions of Part D2, a reference to a storey includes an occupiable outdoor area.
G6.6 Firefighting equipment				X	For the purposes of the DTS provisions of Part E1, a reference to a storey includes an occupiable outdoor area.

**SECTION J****ENERGY EFFICIENCY**

\*\*\*NOTE – BCA 2019 REQUIREMENTS FOR SECTION J DO NOT COME INTO EFFECT UNTIL MAY 2020\*\*\*

## SECTION J - NATIONAL ENERGY EFFICIENCY PROVISIONS

## Part J0: Energy Efficiency

J0.1 Application of Section J			X		Informational clause
J0.2 Heating and cooling loads of sole-occupancy units of a class 2 building or a class 4 part				X	The sole-occupancy units of a Class 2 building or a Class 4 part of a building must— (a) for reducing the heating or cooling loads— (i) collectively achieve an average energy rating of not less than 6 stars; and (ii) individually achieve an energy rating of not less than 5 stars, using house energy rating software; and (b) for general thermal construction, comply with J1.2; and (c) for thermal breaks, comply with J1.3(d) and J1.5(c); and (d) for compensating for a loss of ceiling insulation, comply with J1.3(c); and (e) for floor edge insulation, comply with J1.6(c) and J1.6(d); and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					(f) for building sealing, comply with Part J3.
J0.3 Ceiling fans				X	Ceiling fans required as part of compliance with J0.2(a), must— (a) be permanently installed; and (b) have a speed controller; and (c) serve the whole room, with the floor area that a single fan serves not exceeding— (i) 15 m <sup>2</sup> if it has a blade rotation diameter of not less than 900 mm; and (ii) 25 m <sup>2</sup> if it has a blade rotation diameter of not less than 1200 mm.
J0.4 Roof thermal breaks					For compliance with J0.2(c), a roof that – (a) Has metal roof sheet roofing fixed to metal purlins, metal rafters or metal battens; and (b) Does not have a ceiling lining or has a ceiling lining fixed directly to those metal purlins, metal rafters or metal battens, must have a thermal break, consisting of a material with an R-Value of not less than R0.2, installed at all points of contact between the metal sheet roofing and its supporting metal purlins, metal rafters or metal battens.
J0.5 Wall thermal breaks					For compliance with J0.2(c), a wall that – (a) Does not have a wall lining or has a wall lining that is fixed directly to the same metal frame; and (b) Has lightweight external cladding such as weatherboards, fibre-cement or metal sheeting fixed to a metal frame, must have a thermal break, consisting of a material with an R-Value of not less than R0.2, installed at all points of contact between the external cladding and metal frame.
<b>Part J1: Building Fabric</b>					
J1.1 Application of Part				X	The DTS Provisions of this Part apply to building elements forming the envelope of Class 2 to 9 buildings.
J1.2 Thermal construction –general				X	Where required, insulation must be provided as per AS/NZS 4859.1-2002 and installed as per this clause.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate specification</i></b>
J1.3 Roof and ceiling construction				X	A roof or ceiling that is part of the envelope, other than a sole occupancy unit of a Class 2 building or Class 4 part of a building, must achieve the Total R-Value specified in Table J1.3a for the direction of heat flow, and must satisfy all requirements of this clause.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate specification</i></b>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
J1.4 Roof lights			X		Roof lights including any shaft or diffuser forming part of the envelope, must comply with the thermal performance requirements of Table J1.4. Refer additional requirements relevant to satisfying Part F4.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate specification</i></b>
J1.5 Walls				X	Each part of a wall that is part of the envelope must satisfy one of the thermal performance options in Table J1.5, noting the specific exceptions of this clause relevant to doors, vents, penetrations, shutters, glazing, and an earth retaining wall or earth berm, in other than climate zone 8.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate specification</i></b>
J1.6 Floors				X	A floor that is part of the building's envelope must achieve the Total R-Value specified in Table J1.6, and must satisfy all requirements of this clause.
<b>Part J2: Glazing</b>					
J2.1 Application of Part				X	The DTS Provisions of this Part apply to building elements forming the envelope of Class 2 to 9 buildings, other than a sole occupancy unit of a class 2 building or Class 4 part of a building.
J2.4 Glazing				X	The glazing in each storey, including any mezzanine, must be assessed separately in accordance with the requirements of this clause, for:  (a) Glazing in the external fabric facing each orientation; and  (b) Glazing in the internal fabric,  to ensure that the aggregate air-conditioning energy value attributable to the glazing does not exceed the allowance obtained by multiplying the façade area that is exposed to the conditioned space for the orientation by the energy index in Table J2.4a.  <b><i>Glazing calculations demonstrating compliance with this clause must be incorporated into the specification</i></b>
J2.5 Shading				X	Where required to comply with J2.4, shading must be provided in accordance with this clause.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
<b>Part J3: Building Sealing</b>					
J3.1 Application of Part				X	The requirements of this Part apply to elements forming the envelope of Class 2 to 9 buildings, other than:





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> <li>❖ A building in a climate zones 1, 2, 3 and 5 where the only means of air-conditioning is by using an evaporative cooler;</li> <li>❖ A permanent building opening necessary for the safe operation of a gas appliance;</li> <li>❖ A building or part where mechanical ventilation required by Part F4 provides sufficient pressurization to prevent infiltration;</li> <li>❖ Parts of buildings that cannot be fully enclosed.</li> </ul>
J3.2 Chimney and flues			X		<p>The chimney or flue of an open solid-fuel burning appliance must be provided with a damper or flap that can be closed to seal the chimney or flue.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
J3.3 Roof lights			X		<p>Roof lights must be sealed, or capable of being sealed as per the requirements of this clause.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
J3.4 Window and doors				X	<p>Seals to restrict air infiltration to windows and doors must be provided as required (note exceptions listed in J3.4 (b), and requirements for sealing of main entrance in J3.4 (d)).</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
J3.5 Exhaust fans				X	<p>Miscellaneous exhaust fans must be fitted with self-closing dampers, where serving a conditioned space or a habitable room in climate zones 4, 5, 6, 7 or 8.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
J3.6 Construction of roofs, walls and floors				X	<p>Roofs, ceilings, walls, floors and any openings such as a window frame, door frame, light frame or the like must be sealed in accordance with the requirements of this clause to minimise air leakage.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>
J3.7 Evaporative coolers				X	<p>An evaporative cooler must be fitted with a self-closing damper of the like when serving a heated space, or a habitable room or a public area of a building in climate zones 4, 5, 6, 7 or 8.</p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b></p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
Part J4: Blank					
Part J5: Air-conditioning and ventilation systems					
J5.1 Application of Part			X		The Deemed-to-Satisfy Provisions of this Part do not apply to a Class 8 electricity network substation.
J5.2 Air-conditioning systems				X	An air-conditioning unit or system must comply with J5.2(a) to J5.2(g). <b><i>Mechanical Design certification must be submitted in support of the construction certificate application</i></b>
J5.3 Mechanical ventilation systems				X	Mechanical ventilation systems must comply with J5.3(a) to J5.3(c). <b><i>Mechanical Design certification must be submitted in support of the construction certificate application</i></b>
J5.4 Miscellaneous exhaust systems				X	A miscellaneous exhaust system with an air flow rate of more than 1000 L/s that is associated with equipment having a variable demand such as a stove in a commercial kitchen or a chemical bath in a factory, must have the means for the operator to reduce the energy used (such as by a variable speed fan), and to stop the motor when it is not needed. Refer concessions contained in this clause. <b><i>Mechanical Design certification must be submitted in support of the construction certificate application</i></b>
J5.5 Ductwork insulation			X		Ductwork and fittings in an air-conditioning system must be provided with insulation complying with AS/NZS 4859.1 and an insulation R-Value as specified in this clause.
J5.6 Ductwork sealing			X		Ductwork in an air-conditioning system with a capacity of 3000 L/s or greater, not located within the only or last room served by the system, must be sealed against air loss in accordance with the duct sealing requirements of AS 4254.1 and AS 4254.2 for the static pressure in the system.
J5.7 Pump systems			X		Pumps and pipework are form part of an air-conditioning system must comply with the requirements of this clause.
J5.8 Pipework insulation			X		Piping, vessels, heat exchangers and tanks containing heating or cooling fluid that are part of an air-conditioning system must be provided with insulation per the requirements of this clause.
J5.9 Space heating			X		A heater used for air-conditioning or as part of an air-conditioning system must be of a type specified in this clause.
J5.10 Refrigerant chillers			X		An air-conditioning system refrigerant chiller must comply with MEPS and the full load operation energy efficiency ratio and integrated part load energy efficiency ration in Table J5.10a or Table J5.10b when determined in accordance with AHRI 551/591.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
J5.11 Unitary air-conditioning equipment			X		Unitary air-conditioning equipment including packaged air-conditioners, split system, and variable refrigerant flow systems must comply with MEPS and for a capacity greater than or equal to 65 kW <sub>r</sub> per the requirements of this clause.
J5.12 Heat rejection equipment			X		The motor rated power of a fan in a cooling tower, closed circuit cooler or evaporative condenser must not exceed the allowances in Table J5.12.  The fan in an air cooled condenser must comply with the requirements of this clause.
Part J6: Artificial lighting and power					
J6.1 Application of Part					J6.2. J6.3 and J6.5(a)(ii) do not apply to a Class 8 electricity network substation.
J6.2 Artificial lighting				X	Artificial lighting must comply with J6.2(a), J6.2(b) and J6.2(c), relevant to maximum permitted illumination power loads.  <b>Electrical Design certification must be submitted in support of the construction certificate application</b>
J6.3 Interior artificial lighting and power control				X	Internal artificial lighting systems must be switched and zoned in accordance with the specific requirements of this clause.  <b>Electrical Design certification must be submitted in support of the construction certificate application</b>
J6.4 Interior decorative and display lighting				X	Interior decorative and display lighting, such as for a foyer mural or art display, must be controlled separately from other artificial lighting, and be switched in accordance with the specific requirements of this clause.  <b>Electrical Design certification must be submitted in support of the construction certificate application</b>
J6.5 Artificial lighting around the perimeter of a building				X	Artificial lighting around the perimeter of a building must be controlled by sensors or time switches in accordance with the specific requirements of this clause. Refer exclusions relevant to emergency lighting and lighting around detention centres.  <b>Electrical Design certification must be submitted in support of the construction certificate application</b>
J6.6 Boiling water and chilled water storage units				X	Power supply to boiling or chilled water storage units must be time switch controlled in accordance with Specification J6.  <b>Electrical Design certification must be submitted in support of the construction certificate application</b>
J6.7 Lifts					Lifts must –  (a) Be configured to ensure artificial lighting and ventilation in the car are turned off when it is unused for 15 minutes and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					(b) Achieve the idle and standby energy performance level in Table 6.7a; and (c) Achieve – (i) The energy efficiency class in Table 6.7b; or (ii) If a dedicated goods lift, energy efficiency class D in accordance with ISO 25745-2.
J6.8 Escalators and moving walkways					Escalators and moving walkways must have the ability to slow to between 0.2m/s and 0.05 m/s when unused for more than 15 minutes.
Part J7: Hot water supply and swimming pool and spa pool plant					
J7.2 Hot water supply				X	A heated water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NCC Volume Three — Plumbing Code of Australia.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
J7.3 Swimming pool heating and pumping				X	Heating for a swimming pool must be provided by one of the options listed within this clause, and must satisfy the specific requirements of this clause relevant to the provision of pool covers, and time switches. The requirements of this clause do not apply to a spa pool.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
J7.4 Spa pool heating and pumping				X	Heating for a spa pool that shares a water recirculation system with a swimming pool, must be by one of the energy source options listed within this clause, and must satisfy the specific requirements of this clause relevant to the provision of spa pool covers, a push button and time switch operation for the heater.  <b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></b>
Part J8: Access for maintenance and facilities for monitoring					
J8.1 Application of Part			X		The Deemed-to-Satisfy Provisions of this Part do not apply within a sole-occupancy unit of a Class 2 building or a Class 4 part of a building, or to a Class 8 electricity network substation.
J8.2 Access for maintenance			X		This Clause has been deleted
J8.3 Facilities for energy monitoring				X	The building must have facilities to record the consumption of gas and electricity as per clause J8.3(a). OR





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>The building must have facilities to record individually the energy consumption of:</p> <ul style="list-style-type: none"><li>❖ air-conditioning plant including, where appropriate, heating plant, cooling plant and air handling fans; and</li><li>❖ artificial lighting; and</li><li>❖ appliance power; and</li><li>❖ central hot water supply; and</li><li>❖ internal transport devices including lifts, escalators and travelators where there is more than one serving the building; and</li><li>❖ other ancillary plant.</li></ul> <p><i>Noting J8.3(b) above does not apply to class 2 buildings with a floor area &gt;2500m<sup>2</sup> and where the total floor area of the common areas of the class 2 is less than 500m<sup>2</sup></i></p> <p><b><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate specification</i></b></p>



## 5.0 CONCLUSION

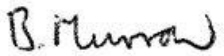

---

This report provided a Building Code of Australia (BCA) 2019 assessment of three storey commercial and retail building including Club Punchbowl and two storey basement carpark, to be located at 21 Canterbury Road, Punchbowl

The primary purpose of this report was to identify the non-compliance matters contained in the proposed design philosophy against the current Deemed-to-Satisfy (DTS) Provisions of the BCA and to provide compliance recommendations to overcome the DTS non-compliances.

This report provided a BCA assessment table in Section 3.0 that summarises the identified non-compliance matters and offers specific recommendations that are also outlined in the Executive Summary.

Further, if compliance with the deemed-to-satisfy provisions is not achievable or desirable, Alternative Solutions could be further developed and verified by an appropriately qualified BCA Consultant or Fire Safety Engineer.

 Ben Murrow for AE&D	 Daniel Keato for AE&D
---	--



## 6.0 ATTACHMENT A - INSPECTION & MAINTENANCE

---

### 6.1 Fire Safety Measures

---

The fire safety measures within the building must be maintained to ensure correct operation at all times the building is occupied. All firefighting equipment should be tagged when tested/inspected and log books kept up-to-date for all smoke detection, warning systems and sprinkler systems (where installed).

An annual fire safety certificate must be submitted to the local consent authority and the NSW Fire Brigade each year indicating satisfactory performance of the fire safety measures contained within the building. The annual fire safety statement should be displayed in a prominent place within the building (i.e. the main entry foyer)

The correct operation and maintenance of the buildings fire safety measures is critical in affording an adequate level of fire safety.

### 6.2 Good Housekeeping

---

The ongoing management of the building should ensure good housekeeping procedures. The following matters should be considered by building management:

- ❖ Ensure exits and paths of travel to exits remain unobstructed (in particular stairways)
- ❖ Avoid storage of materials in unoccupied areas
- ❖ Limit storage of flammable/combustible materials to designated and approved areas
- ❖ Prevent chocking open fire/smoke doors
- ❖ Prevent storage of materials that could hinder access to firefighting equipment





## 7.0 ATTACHMENT B – REQUIREMENTS TYPE A CONSTRUCTION

### 7. Fire-resistance of building elements

#### 7.1 In a building required to be of Type A construction—

- (a) each building element listed in Table 3 and any beam or column incorporated in it, must have an FRL not less than that listed in the Table for the particular Class of building concerned; and
- (b) \* \* \* \* \*
- (c) any internal wall required to have an FRL with respect to integrity and insulation must extend to—
  - (i) the underside of the floor next above; or
  - (ii) the underside of a roof complying with Table 3; or
  - (iii) if under Clause 3.5 the roof is not required to comply with Table 3, the underside of the non-combustible roof covering and, except for roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not be crossed by timber or other combustible building elements; or
  - (iv) a ceiling that is immediately below the roof and has a resistance to the incipient spread of fire to the roof space between the ceiling and the roof of not less than 60 minutes; and
- (d) a loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft) must be constructed from—
  - (i) concrete; or
  - (ii) masonry; or
  - (iii) fire-protected timber, provided that—
    - (A) the building is—
      - (aa) a separate building; or
      - (bb) a part of a building—
        - (AA) (AA) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or
        - (BB) (BB) which is located above or below a part not containing fire-protected timber and the floor between the adjoining parts is provided with an FRL not less than that prescribed for a fire wall for the lower storey; and
    - (B) the building has an effective height of not more than 25 m; and
    - (C) the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with Specification E1.5; and
    - (D) any insulation installed in the cavity of the timber building element required to have an FRL is non-combustible; and
    - (E) cavity barriers are provided in accordance with Specification C1.13; or
  - (iv) any combination of (i) to (iii); and
- (e) \* \* \* \* \*
- (f) the FRLs specified in Table 3 for an external column apply also to those parts of an internal column that face and are within 1.5 m of a window and are exposed through that window to a fire-source feature.

Table 3 Type A Construction: FRL of Building Elements

Building Element	Class of building – FRL: (in minutes)			
	<i>Structural adequacy/Integrity/Insulation</i>			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
<b>EXTERNAL WALL</b> (including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is—				



Building Element	Class of building – FRL: (in minutes) <i>Structural adequacy/Integrity/Insulation</i>			
For loadbearing parts—				
Less than 1.5m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3m	90/60/60	120/90/90	180/180/120	240/240/180
3m or more	90/60/30	120/60/30	180/120/90	240/180/90
For non-loadbearing parts—				
Less than 1.5m	-/90/90	-/120/120	-/180/180	-/240/240
1.5 to less than 3m	-/60/60	-/90/90	-/180/120	-/240/180
3m or more	-/-/-	-/-/-	-/-/-	-/-/-
EXTERNAL COLUMN not incorporated in an external wall—				
For loadbearing columns -	90/-/-	120/-/-	180/-/-	240/-/-
For non-loadbearing columns -	-/-/-	-/-/-	-/-/-	-/-/-
COMMON WALLS AND FIRE WALLS	90/90/90	120/120/120	180/180/180	240/240/240
<b>INTERNAL WALLS</b>				
Fire-resisting lift and stair shafts				
Loadbearing	90/90/90	120/120/120	180/120/120	240/120/120
Non-loadbearing	-/90/90	-/120/120	-/120/120	-/120/120
Bounding public corridors, public lobbies and the like -				
Loadbearing	90/90/90	120/-/-	180/-/-	240/-/-
Non-loadbearing	-/60/60	-/-/-	-/-/-	-/-/-
Between or bounding sole-occupancy units				
Loadbearing	90/90/90	120/-/-	180/-/-	240/-/-
Non-loadbearing	-/60/60	-/-/-	-/-/-	-/-/-
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion -				
Loadbearing	90/90/90	120/90/90	180/120/120	240/120/120
Non-loadbearing	-/90/90	-/90/90	-/120/120	-/120/120
<b>OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES</b>				
And Columns -	90/-/-	120/-/-	180/-/-	240/-/-
Floors	90/90/90	120/120/120	180/180/180	240/240/240
Roofs	90/60/30	120/60/30	180/60/30	240/90/60

## 7.2 Concessions for floors

A floor need not comply with Table 3 if—

- (a) it is laid directly on the ground; or
- (b) in a Class 2, 3, 5 or 9 building, the space below is not a storey, does not accommodate motor vehicles, is not a storage or work area, and is not used for any other ancillary purpose; or
- (c) it is a timber stage floor in a Class 9b building laid over a floor having the required FRL and the space below the stage is not used as a dressing room, store room, or the like; or
- (d) it is within a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building; or



- (e) it is an open-access floor (for the accommodation of electrical and electronic services and the like) above a floor with the required FRL.

### 7.3 Floor loading of Class 5 and 9b buildings: Concession

If a floor in a Class 5 or 9b building is designed for a live load not exceeding 3 kPa—

- (f) the floor next above (including floor beams) may have an FRL of 90/90/90; or
- (g) the roof, if that is next above (including roof beams) may have an FRL of 90/60/30.

### 7.4 Roof superimposed on concrete slab: Concession

A roof superimposed on a concrete slab roof need not comply with Clause 3.1 as to fire-resisting construction if—

- (a) the superimposed roof and any construction between it and the concrete slab roof are non-combustible throughout; and
- (b) the concrete slab roof complies with Table 3.

### 7.5 Roof: Concession

A roof need not comply with Table 3 if its covering is non-combustible and the building—

- (a) has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification E1.5 installed throughout; or
- (b) has a rise in storeys of 3 or less; or
- (c) is of Class 2 or 3; or
- (d) has an effective height of not more than 25 m and the ceiling immediately below the roof has a resistance to the incipient spread of fire to the roof space of not less than 60 minutes.

### 7.6 Roof lights

If a roof is required to have an FRL or its covering is required to be non-combustible, roof lights or the like installed in that roof must—

- (a) have an aggregate area of not more than 20% of the roof surface; and
- (b) be not less than 3 m from—
  - (i) any boundary of the allotment other than the boundary with a road or public place; and
  - (ii) any part of the building which projects above the roof unless that part has the FRL required of a fire wall and any openings in that part of the wall for 6 m vertically above the roof light or the like are protected in accordance with C3.4; and
  - (iii) any roof light or the like in an adjoining sole-occupancy unit if the walls bounding the unit are required to have an FRL; and
  - (iv) any roof light or the like in an adjoining fire-separated section of the building; and
- (c) if a ceiling with a resistance to the incipient spread of fire is required, be installed in a way that will maintain the level of protection provided by the ceiling to the roof space.

### 7.7 Internal columns and walls: Concession

**For a building with an effective height of not more than 25 m and having a roof without an FRL in accordance with Clause 3.5, in the storey immediately below that roof, internal columns other than those referred to in Clause 3.1(f) and internal walls other than fire walls and shaft walls may have—**

- (a) in a Class 2 or 3 building: FRL 60/60/60; or
- (b) in a Class 5, 6, 7, 8 or 9 building—
  - (i) with rise in storeys exceeding 3: FRL 60/60/60; or
  - (ii) with rise in storeys not exceeding 3: no FRL.

### 7.8 Open spectator stands and indoor sports stadiums: Concession

In an open spectator stand or indoor sports stadium, the following building elements need not have the FRL specified in Table 3:



- (a) The roof if it is non-combustible.
- (b) Columns and loadbearing walls supporting only the roof if they are non-combustible.
- (c) Any non-loadbearing part of an external wall less than 3 m—
  - (i) from any fire-source feature to which it is exposed if it has an FRL of not less than -/60/60 and is non-combustible; or
  - (ii) from an external wall of another open spectator stand if it is non-combustible.

## 7.9 Carparks

- (a) Notwithstanding Clause 3.1, a carpark may comply with Table 3.9 if it is an open-deck carpark or is protected with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification E1.5 and is—
  - (i) a separate building; or
  - (ii) a part of a building—
    - (A) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or
    - (B) which is located above or below another classification, and the floor separating the classifications complies with C2.9; or
    - (C) which is located above another Class 7 part of the building not used for carparking, and the floor separating the parts complies with Table 3 for a Class 7 part other than a carpark; or
    - (D) which is located below another Class 7 part of the building not used for carparking, and the floor separating the parts complies with Table 3.9.
- (b) For the purposes of this Clause, a carpark—
  - (i) includes—
    - (A) an administration area associated with the functioning of the carpark; and
    - (B) where the carpark is sprinklered, is associated with a Class 2 or 3 building and provides carparking for separate sole-occupancy units, each carparking area with an area not greater than 10% of its floor area for purposes ancillary to the sole-occupancy units; but
  - (ii) excludes—
    - (A) except for (b)(i), any area of another classification, or other part of a Class 7 building not used for carparking; and
    - (B) a building or part of a building specifically intended for the parking of trucks, buses, vans and the like.

Table 3.9 – Requirements for carparks

Building Element	FRL (not less than) <i>Structural adequacy/Integrity/Insulation ESA/M (not greater than)</i>
Wall	
(a) External Wall	
(i) Less than 3m from a fire-source feature to which it is exposed:	
Loadbearing	60/60/60
Non-loadbearing	-/60/60
(ii) 3m or more from a fire-source feature to which it is exposed	-/-
(b) Internal Wall	
(i) Loadbearing, other than one supporting only the roof (not used for carparking)	60/-

Building Element		FRL (not less than) <i>Structural adequacy/Integrity/Insulation ESA/M (not greater than)</i>	
(c)	(ii)	Supporting only the roof (not used for carparking).	-/-/-
	(iii)	Non-loadbearing	-/-/-
	Fire wall		
	(i)	From the direction used as a carpark	60/60/60
	(ii)	From the direction not used as a carpark	As required by Table 7.1
Column			
(a)	Supporting only the roof (not used for carparking) and 3m or more from a fire-source to which it is exposed	-/-/-	
(b)	Steel column other than one covered by (a) and one that does not support a part of a building that is not used as a carpark	60/-/- or 25m <sup>2</sup> /tonne	
(c)	Any other column not covered by (a) or (b)	60/-/-	
Beam			
(a)	Steel floor beam in continuous contact with a concrete floor slab	60/-/- or 30m <sup>2</sup> /tonne	
(b)	Any other beam	60/-/-	
Fire resisting lift and stair shaft (within the carpark only)		60/60/60	
Floor slab and vehicle ramp		60/60/60	
Roof (not used for carparking)		-/-/-	

Notes to Table 3.9:

1. ESA/M means the ratio of exposed surface area to mass per unit length.

2. Refer to Specification E1.5 for special requirements for a sprinkler system in a carpark complying with Table 3.9 and located within a multi-classified building.

### 7.10 Class 2 and 3 buildings: Concession

- (a) A Class 2 or 3 building having a rise in storeys of not more than 3 need not comply with Clause 3.1(d) of Specification C1.1 and the requirements of C1.9(a), (b) and C2.6 for non-combustible material, if it is constructed using—
- (i) timber framing throughout; or
  - (ii) non-combustible material throughout; or
  - (iii) a combination of (i) and (ii), provided—
  - (iv) \* \* \* \* \*
  - (v) any insulation installed in the cavity of a wall required to have an FRL is non-combustible; and
  - (vi) the building is fitted with an automatic smoke alarm system complying with Specification E2.2a.
- (b) A Class 2 or 3 building having a rise in storeys of not more than 4 may have the top three storeys constructed in accordance with (a) provided—
- (i) the lowest storey is used solely for the purpose of parking motor vehicles or for some other ancillary purpose; and
  - (ii) the lowest storey is constructed of concrete or masonry including the floor between it and the Class 2 or 3 part of the building above; and
  - (iii) the lowest storey and the storey above are separated by construction having an FRL of not less than 90/90/90 with no openings or penetrations that would reduce the fire-resisting performance of that construction except that a doorway in that construction may be protected by a –/60/30 self-closing fire door.



- (c) In a Class 2 or 3 building complying with (a) or (b) and fitted with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification E1.5, any FRL criterion prescribed in Table 3—
- (i) for any floor and any loadbearing wall, may be reduced to 60, except any FRL criterion of 90 for an external wall must be maintained when tested from the outside; and
  - (ii) for any non-loadbearing internal wall, need not apply if—
    - (A) it is lined on each side with 13 mm standard grade plasterboard or similar non-combustible material; and
    - (B) it extends—
      - (aa) to the underside of the floor next above; or
      - (bb) to the underside of a ceiling with a resistance to the incipient spread of fire of 60 minutes; or
      - (cc) to the underside of a non-combustible roof covering; and
    - (C) any insulation installed in the cavity of the wall is non-combustible; and
    - (D) any construction joint, space or the like between the top of the wall and the floor, ceiling or roof is smoke sealed with intumescent putty or other suitable material; and
    - (E) any doorway in the wall is protected by a self-closing, tight fitting, solid core door not less than 35 mm thick.

