

# BUILDING CODE OF AUSTRALIA–2016

## ~ ASSESSMENT REPORT ~

Prepared for: PAM CORNERSTONE P/L.

Date: 24th FEBRUARY, 2017.

Project Address: 71 PARK AVENUE,  
KINGSWOOD.

Prepared by: Peter Dix  
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| Revision | Description | Date |
|----------|-------------|------|
|          |             |      |

## 1.0 INTRODUCTION

### 1.1 Background

Building Code Assistance was requested by Mr Andrew Hanna of H. Corp National Pty Ltd on behalf of Pam Cornerstone P/L to assess the architectural plans as provided for the proposed mixed use development and prepare a BCA Assessment Report in relation to compliance with the Building Code of Australia.

The proposed building being the subject of this report is a new 8 storey building located at 71 Park Avenue, Kingswood consisting of the following :-

|                        |  |
|------------------------|--|
| Basement 1 and 2       | Car park   |
| Ground                 | Residential units, main entry lobby and Childcare Centre                                     |
| Level 1 to 4 inclusive | Residential units  |
| Level 5 ( roof )       | Residential units, Residential communal open space and Childcare Centre roof top open space. |

It is noted the proposed building is in the final stages of planning and development, construction is required to comply with the requirements of the Building Code of Australia applicable at the time of lodgment of the Construction Certificate.

### 1.2 Purpose of the Report

The purpose of this report is to identify any items on the architectural plans provided that may not and/or is required to fully comply with the Current Edition of Building Code of Australia - 2016 Volume One for Class 2 to Class 9 Buildings that may be applicable to the proposed development.

### 1.3 Basis of Report

This report is based on:

- i. The Building Code of Australia 2016 – Volume One
- ii. The architectural plans prepared by Stephen Bowers - Architects.

### 1.4 Limitations of the Report

This report does not assess the following:

- OH & S requirements
- Determining the full compliance with the BCA, other than the matters identified
- Accessibility requirements under the Disability Discrimination Act.1992
- Disability (Access to Premises - Buildings) Standards 2010
- The requirements of other service providers ( Telephone, Electricity or Gas ) etc.
- Basix and Section J requirements of the Environmental Planning and Assessment Regulation 2000 and the BCA respectively.

Note: These requirements are to be assessed by an ABSA Accredited Assessor with all the recommended works to be detailed on the Construction Certificate plans.

## 1.5 Executive Summary

Initial assessment of documentation provided has revealed that the proposed development generally complies and/or is capable of complying with the requirements of the Building Code of Australia Volume One 2016 known as the National Construction Code.

A number of minor items were identified that may be required to be rectified to comply with the Deemed-to-Satisfy provisions of the Building Code of Australia or be considered in an Alternative Solution if prepared to satisfy the Performance Provisions of the BCA subject to approval and acceptance by the Certifier.

Details of these and other provisions of the Building Code of Australia and appropriate Australian Standards are identified in the following sections.

Where compliance with the Deemed-to-Satisfy provisions of the BCA cannot be achieved further assessment under the Performance Provisions will be required subject to consultation with the Certifying Authority, Fire and Rescue NSW and a Fire Engineer as applicable.

Following the review and assessment of the architectural plans and documentation provided it has been resolved that the proposed development is capable of complying with the Deemed-to-Satisfy and/or Performance Provisions of the Building Code of Australia.



Assessed by:

Peter Dix  
Principal Building Surveyor  
Member AIBS

## 2.0 SUMMARY OF REVIEW

The Deemed-to-Satisfy requirements of the BCA have been considered in the assessment as requested.

An Energy Efficiency report will be required to determine compliance with J1 to J8 inclusive as applicable

Section 4 ( BCA Assessment ) identifies the BCA provisions required to be satisfied to achieve compliance with the BCA, and submitted with the Construction Certificate.

Should additional information be required the plans are to be amended as applicable and provided when the Construction Certificate is lodged to ensure compliance is achieved with the BCA in relation to the proposed development

Where a technical non-compliance with the prescriptive requirements has been identified and full compliance cannot be achieved, an alternative solution prepared by an appropriately qualified person to demonstrate compliance with the performance requirements of the Building Code of Australia may be appropriate.

## 3.0 BUILDING ASSESSMENT DATA

Summary of Proposed Construction Determination:

| Part of Project            | Building  |
|----------------------------|---|
| Classification             | Class 2 - Residential, Class 7a - Car Park ,<br>Class 9b - Child Care Centre. |
| Number of Storey Contained | 8 - ( Basement Level 2 to Level 5 )   |
| Rise in Storey             | 6 - ( Ground to Level 5 )   |
| Type of Construction       | "A"   |
| Effective Height (m)       | > 12m and < 25m   |

Architectural Plans: dated February, 2017  
prepared by Stephen Bowers Architects.

Proposed Building:

|  |  |
|--|--|
| DA-009 - Site Plan                             | DA-010 - Basement 2 Plan                       |
| DA-011 - Basement 1 Plan                       | DA-012 - Ground Floor Plan                     |
| DA-013 - Level 1 Plan                          | DA-014 - Level 2 Plan                          |
| DA-015 - Level 3 Plan                          | DA-016 - Level 4 Plan                          |
| DA-016 - Level 5 Plan                          |  |
| DA-021 - South Elevation, Materials & Finishes | DA-022 - East Elevation, Materials & Finishes  |
| DA-023 - West Elevation, Materials & Finishes  | DA-024 - North Elevation, Materials & Finishes |
| DA-031 - Section A - A                         | DA-031 - Section B - B                         |

BCA2016 Volume One – Class 2 to 9 Buildings and AS 1428.1- 2009

## 4.0 BCA ASSESSMENT – COMPLIANCE & DEFICIENCIES AS NOTED

| BCA Clause  | Description of Requirement  | Status/Action Required   |
|---|---|--|
| <b>SECTION A – General Provisions</b>                       |   |  |
| <b>PART AO - APPLICATION</b>                                |   |  |
| AO.1 - AO .10   | <b>Adoption.</b> The dates of adoption of the Building Code of Australia (Volume One) are shown in the “History of BCA Adoption” division at the end of this Volume.  | Noted, compliance required as applicable.  |
| <b>PART A1 - INTERPRETATION</b>                             |   |  |
| A1.1 – A1.8   | Definitions, Adoption of Standards, Ref. Standards, Differences between ref. documents and the NCC, Compliance with all Performance Requirements, Application of the NCC to a particular State or Territory, Language, Explanatory information  | Noted, compliance required as applicable.  |
| <b>PART A2 – ACCEPTANCE OF DESIGN AND CONSTRUCTION</b>      |   |  |
| A2.1 – A2.5   | Suitability of materials, Evidence of suitability, Fire resistance of building elements, Fire hazard properties, Resistance to the incipient spread of fire.  | Noted, compliance required as applicable.  |
| <b>PART A3 – CLASSIFICATION OF BUILDINGS AND STRUCTURES</b> |   |  |
| A3.1 Principals of classifications                          | The classification of a building or part of a building is determined by the purpose for which it is designed, constructed or adapted to be used.  | Noted, compliance required as applicable.  |
| A3.2 Classifications  | Buildings are classified as follows:<br>Class 2: a building containing 2 or more SOU each being a separate dwelling.<br>Class 7: a building which is— (a) Class 7a — a <i>car park</i> ,<br>Class 9: a building of a public nature—(b) Class 9b — an <i>assembly building</i> , including a trade workshop, laboratory or the like in a primary or secondary <i>school</i> but excluding any other parts of the building that are of another Class. | The proposed development is classified as:<br>- Class 2 residential and<br>- Class 7a car park and<br>- Class 9b Child care centre |
| A3.3 Multiple Class.  | Each part of a building must be classified separately for each class.   | Noted, compliance achieved.  |
| A3.4 Parts with > than one class                            | (a) Notwithstanding A3.3, a building or part of a building may have more than one classification applying to the whole building or to the whole of that part of the building.   | Noted, each part having different classifications must comply with the relevant provisions for each classification.                |
| <b>PART A - SPECIFICATIONS</b>                              |   |  |
| A1.1 - Fire Protected Timber                                | 1. Scope This Specification contains requirements for <i>fire-protected timber</i> and procedures for determining the time at which the temperature .....   | Noted, however not applicable as fire protected timber is not proposed for the subject development.                                |

| BCA Clause                               | Description of Requirement   | Status/Action Required  |
|--|--|---|
| A1.3 Documents adopted by ref.           | Schedule of Australian Standards adopted by the BCA.   | Compliance with all Australian Standards as applicable is to be maintained. Details to be submitted with CC   |
| A2.3 Fire Resist. of building elements   | This Specification sets out the procedures for determining the FRL of building elements.   | Any building element required to have an FRL, must have it determined in accordance with Specification A2.3.  |
| A2.4 Fire Hazard Properties              | Scope: This Specification sets out the procedures for—<br>(a) determining the <i>fire hazard properties</i> of assemblies tested to AS/NZS 1530.3; and<br>(b) predicting a material's <i>group number</i> and <i>smoke growth rate index</i> (SMOGR <sub>RC</sub> ) for the purposes of <u>Spec. C1.10</u>   | Compliance is required as appropriate.<br>Details to be submitted with CC   |
| <b>SECTION B - Structure</b>             |  |   |
| B1.0 Deemed to Satisfy Provisions        | This clause specifies (a) that the performance provisions (BP1.1 to BP1.4) are satisfied by complying with B1.1, B1.2, B1.4, B1.5 and B1.6 where a building solution is proposed.<br>(b) The DTS Provisions of B1.1, B1.2, B1.4, B1.5, B1.6, the relevant Performance Requirements must be determined in accordance with A0.10, where a Building Solution is proposed as an Alternative Solution | Noted   |
| B1.1 Resistance to actions               | The resistance of a building or structure must be greater than the most critical action effect resulting from different combinations of actions, where.....  | Compliance with AS/NZS 1170.0 will be required as appropriate and the resistance of a building or structure is determined in accordance with B1.4.                      |
| B1.2 Determination of Individual Actions | Specifies requirements for the following actions:<br>(a) Permanent actions; (b) Imposed actions; (c) Wind, snow and ice and earthquake actions; (d) Actions not covered in (a), (b) and (c) above;<br>(e) For the purposes of (d) the actions include but are not limited to.....  | The magnitude of individual actions must be determined in accordance with the (a) to (e) inclusive as appropriate.  |
| B1.4 Determination of Structural Resist. | The structural resistance of materials and forms of construction must be determined in accordance with the following appropriate Australian Standards  | Compliance will be required with the relevant Australian Standards identified in (a) to (m) inclusive as appropriate.   |
| B1.5 Structural Software                 | (a) Structural software used in computer aided design of a building or structure.....<br>(b) The requirements of (a) only apply to structural software used to .....<br>(c) The requirements of (a) do not apply to design software for individual frame .....   | This clause specifies the structural software used in the design of buildings and structures, must comply with the ABCB Protocol for Structural Software as applicable. |
| B1.6                                     | Construction of Buildings in Flood Hazard Areas  | A Class 2 building, in a <i>flood hazard area</i> must comply with ABCB Standard for Construction of Buildings in FHA's   |

| BCA Clause                                       | Description of Requirement  | Status/Action Required  |
|--|---|---|
| <b>SECTION C – Fire Resistance</b>               |   |   |
| <b>Part C1 - FIRE RESISTANCE AND STABILITY</b>   |   |   |
| C1.1 Type of construction req.                   | (a) The minimum Type of <i>fire-resisting construction</i> of a building must be that specified in Table C1.1 and Specification C1.1, except as allowed for—  | Compliance with the requirements of Type A construction is required for the proposed building.  |
| C1.2   | Calculation of rise in storey's   | The proposed development has a rise in storey of 6 when considering Ground floor - Level 5 inclusive.   |
| C1.3 Buildings of multiple classes               | In a building of multiple classifications, the Type of construction <i>required</i> for the building is the most <i>fire-resisting</i> Type resulting from the application of Table C1.1. on the basis that the classification applying to the top <i>storey</i> applies to all <i>storeys</i> .  | The top storey is Class 2 and 9, therefore Type A construction is required throughout.  |
| C1.4, C1.5, C1.6, C1.7                           | Mixed types of construction, Two storey Class 2, 3 or 9c buildings, Class 4 parts of buildings, Open spectator stands and indoor sports stadiums.   | Not applicable to the proposed development.   |
| C1.8 Lightweight Construction                    | (a) <i>Lightweight construction</i> must comply with Spec.C1.8 if it is used in a wall system. i, ii<br>(b) If <i>lightweight construction</i> is used for the <i>fire-resisting</i> covering of a steel column or the like, and if.....(i ) and (ii).  | Details to be provided with the Construction Certificate if lightweight construction is to be used within the proposed development.   |
| C1.10 Fire Hazard Properties                     | (a) The <i>fire hazard properties</i> of the following linings, materials and assemblies in a Class 2 to 9 building must comply with Specification C1.10: i, ii, iii, iv and v, inclusive.<br>(b) Paint or fire-retardant coatings must not be used in order to make a material comply with a required fire hazard property, except in respect of a material referred to in NSW Specification C1.10, NSW Table 4 and to which Notes 4 and 5 are applicable.<br>(c) The requirements of (a) do not apply to a material or assembly if it is— (I) to (xv) | Materials are to be identified and details to be submitted with the Construction Certificate in particular for any proposed Aluminium Composite Panels and Timber Panelling and certification provided prior to occupation. |
| C1.11  | Performance of External Walls in Fire   | Not applicable to the proposed development.   |
| C1.12 Non Combustible Mat.                       | The following materials, though <i>combustible</i> or containing <i>combustible</i> fibres, may be used wherever a <i>non-combustible</i> material is <i>required</i> : (a) to (iv) inclusive.  | This clause determines the type of materials to be used where non-combustible materials are required.   |
| C1.13 Fire Protected Timber: Concession          | <i>Fire-protected timber</i> in a Class 2, 3 or 5 building may be used wherever an element is <i>required</i> to be <i>non-combustible</i> , provided — (a), (b), (c), (d) and (e) as applicable.   | Noted, however not applicable as fire protected timber is not proposed for the subject development.   |
| <b>Part C2 - COMPARTMENTATION AND SEPARATION</b> |   |   |
| C2.1 Application of Part                         | C2.2, C2.3 and C2.4 do not apply to a <i>carpark</i> provided with a sprinkler system complying with Specification E1.5, an <i>open-deck carpark</i> or an <i>open spectator stand</i> .  | Noted, compliance will be achieved as the car park is required & proposed to be sprinkler protected throughout.   |



| BCA Clause   | Description of Requirement  | Status/Action Required  |
|--|---|---|
| C2.2 General floor area and volume limitations         | (a) The size of any <i>fire compartment</i> or <i>atrium</i> in a Class 5, 6, 7, 8 or 9 building must not exceed the relevant maximum <i>floor area</i> nor the relevant maximum volume set out in Table C2.2 and C2.5 except as permitted in C2.3.   | Noted, floor area and volume limitations are satisfied as the car park is sprinkler protected throughout and the child care centre is less than 8000m <sup>2</sup> ( 420m <sup>2</sup> ).   |
| C2.3, C2.4, C2.5                                       | Large isolated buildings, Requirements for open spaces and vehicular access, Class 9a and 9c buildings  | Not applicable to the proposed development.   |
| C2.6 Vertical separation of openings in external walls | (a) If in a building of Type A construction, any part of a <i>window</i> or other opening in an <i>external wall</i> is above another opening in the <i>storey</i> next below and its vertical projection falls no further than 450 mm outside the lower opening (measured horizontally), the openings must be separated by- (i) a spandrel which- (A) is not less than 900 mm in height; and (B) extends not less than 600 mm above the upper surface of the intervening floor; and (C) is of <i>non-combustible</i> material having an FRL of not less than 60/60/60; or (ii) part of a <i>curtain wall</i> or <i>panel wall</i> that complies with (i); or (iii) construction that complies with (i) behind a <i>curtain wall</i> or <i>panel wall</i> and has any gaps packed with a <i>non-combustible</i> material that will withstand thermal expansion and structural movement of the walling without the loss of seal against fire and smoke; or (iv) a slab or other horizontal construction that (A) projects outwards from the external face of the wall not < 1100mm; & (B) extends along the wall not < 450 mm beyond the openings concerned; & (C) is <i>non-combustible</i> and has an FRL of not less than 60/60/60.<br>(b)The requirements of (a) do not apply to.....  | <ul style="list-style-type: none"> <li>- Compliance is required throughout and generally appears to be achieved to windows in the facades and doorways on balconies as applicable.</li> <li>- However further details are required to be submitted with the Construction Certificate confirming the proposed method of achieving compliance with (a) in relation to the proposed privacy screens on balconies and the location of full height glazing and the edge of a number of balconies.</li> <li>- Spandrel separation is required to satisfy (a)(i) and (a)(iv) throughout as applicable.</li> <li>- Final design details are to be provided with the Construction Certificate demonstrating the proposed method of achieving compliance, plans and elevations are to be reviewed at Construction Certificate stage.</li> </ul> |
| C2.7 Separation by fire walls                          | <p>(a) Construction — A <i>fire wall</i> must be constructed in accordance with the following:</p> <ul style="list-style-type: none"> <li>(i) The <i>fire wall</i> 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 <i>car park</i> side.</li> <li>(ii) Any openings in a <i>fire wall</i> must not reduce the FRL <i>required</i> by Specification C1.1 for the <i>fire wall</i>, except where permitted by the <i>DTS</i> of Part C3.</li> <li>(iii) Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or <i>sarking-type material</i>, must not pass through or cross the <i>fire wall</i> unless the <i>required fire resisting performance</i> of the <i>fire wall</i> is maintained.</li> </ul> <p>(b) Separation of buildings — A part of a building separated from the remainder of the building by a <i>fire wall</i> may be treated as a separate building for .....</p> <p>(c) Separation of fire compartments — A part of a building separated from the remainder of the building by a <i>fire wall</i> may be treated as a separate <i>fire compartment</i> if it is constructed in accordance with (a) and the <i>fire wall</i> extends to the underside of— (i) a floor having an FRL <i>required</i> for a <i>fire wall</i>; or (ii) the roof covering.</p> | <ul style="list-style-type: none"> <li>- A fire wall constructed in accordance with (a) is required to separate the Child care centre from the residential part on the ground floor, unless the building elements throughout the ground floor have the higher FRL for a Class 9 building as prescribed in Table 3 of Spec. C1.1.</li> <li>- The fire wall is to have a minimum FRL of not less than 120/120/120 with minimum -/90/30 fire doors.</li> <li>- Notwithstanding the above the requirements of Clause C3.11 for bounding construction in a Class 2 is also required to be satisfied.</li> </ul>  |

| BCA Clause   | Description of Requirement   | Status/Action Required   |
|--|--|--|
| C2.8 Separation of classifications in the same storey    | <p>If a building has parts of different classifications located alongside one another in the same <i>storey</i>—</p> <p>(a) each building element in that <i>storey</i> must have the higher FRL prescribed in Specification C1.1 for that element for the classifications concerned; or</p> <p>(b) the parts must be separated in that <i>storey</i> by a <i>fire wall</i> having—(i) the higher FRL prescribed in Table 3 or 4; or (ii) the FRL prescribed in Table 5, of Specification C1.1 as applicable, for that element for the Type of construction &amp; the classifications concerned or</p> <p>(c) where one part is a car park complying with Table 3.9, 4.2 or 5.2 of Specification C1.1, the parts may be separated by a <i>fire wall</i> complying with the appropriate Table.</p>                      | <ul style="list-style-type: none"> <li>- A fire wall constructed in accordance with (a) is required to separate the Child care centre from the residential part on the ground floor, unless the building elements throughout the ground floor have the higher FRL for a Class 9 building as prescribed in Table 3 of Spec. C1.1.</li> <li>- The fire wall is to have a minimum FRL of not less than 120/120/120 with minimum -/90/30 fire doors.</li> <li>- Notwithstanding the above the requirements of Clause C3.11 for bounding construction in a Class 2 is also required to be satisfied.</li> </ul> |
| C2.9 Separation of classifications in different storey's | <p>If parts of different classification are situated one above the other in adjoining <i>storeys</i> they must be separated as follows:</p> <p>(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 <i>storey</i>.</p>  | <p>Noted, compliance required as applicable.</p> <ul style="list-style-type: none"> <li>- The floor between Basement 1 car park and the ground floor requires an FRL of not less than 120/120/120.</li> <li>- The floor between the ground floor child care centre and level 1 requires a minimum FRL of 120/120/120.</li> <li>- The floor between residential levels requires a minimum FRL of 90/90/90.</li> </ul>   |
| C2.10 Separation of lift shafts                          | <p>(a) Any lift connecting more than 2 <i>storeys</i>, or more than 3 <i>storeys</i> if the building is sprinklered, must be separated from the remainder of the building by enclosure in a <i>shaft</i> in which— (i) in a building <i>required</i> to be of Type A construction—the walls have the relevant FRL prescribed by Specification C1.1;</p> <p>(c) An emergency lift must ...</p>  | <ul style="list-style-type: none"> <li>- The lift must be contained within a <i>fire-resisting shaft</i> having an FRL of not less than 90/90/90 in the Class 2 levels and 120/120/120 in the car park.</li> <li>- Openings for lift landing doors and services must be protected in accordance with <i>DTS Provisions</i> of Part C3.</li> </ul> <p>Note:– Clause C3.10 requires Min. -/60/- fire doors to lifts.</p>   |
| C2.11  | Stairways and lifts in one shaft   | Not applicable to the proposed development.  |
| C2.12 Separation of equipment                            | <p>(a) Equipment other than that described in (b) and (c) must be separated from the remainder of the building with construction complying with (d), if that equipment comprises.....(i) lift motors and lift control panels; or (ii) emergency generators used to sustain emergency equipment operating in the emergency mode; or (iii) central smoke control plant; or (iv) boilers; or (v) a battery or batteries installed in the building that have a voltage exceeding 24 volts and a capacity exceeding 10 ampere hours.</p> <p>(b) Equipment need not be separated in accordance with (a) if the equipment comprises— (i) or (ii) or (iii) or (iv).</p> <p>(c) Separation of on-site fire pumps must comply with the requirements of AS 2419.1.</p> <p>(d) Separating construction must have— (i) or (ii).</p> | <ul style="list-style-type: none"> <li>- Separation of on-site fire pumps must comply with the requirements of AS 2419.1 to satisfy (c).</li> <li>- Separating construction of equipment contained in (i) to (v) inclusive must have—(i) except as provided by (ii) an FRL as <i>required</i> by Specification C1.1, but not less than 120/120/120; and any doorway protected with a <i>self-closing</i> fire door having an FRL of not less than -/120/30; or when separating a lift <i>shaft</i> and lift motor room, an FRL not less than 120/-/- to satisfy (d).</li> </ul>                            |

| BCA Clause                                    | Description of Requirement  | Status/Action Required   |
|---|---|--|
| C2.13<br>Electricity supply system            | <p>(a) An electricity substation located within a building must be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and have any doorway in that construction protected with a <i>self-closing</i> fire door having an FRL of not less than –/120/30.</p> <p>(b) A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must.....</p> <p>(c) Electrical conductors located within a building that supply a substation located within the building which supplies a main switchboard covered by (b); or a main switchboard covered by (b), must have a classification in accordance with AS/NZS 3013 of not less than—(A) or (B) or be enclosed or otherwise protected by construction having an FRL of not less than 120/120/120.</p> <p>(d) Where emergency equipment is <i>required</i> in a building, all switchboards in the electrical installation, which sustain the electricity supply to the emergency equipment,...</p> <p>(e) For the purposes of (d), emergency equipment includes but is not limited to the following: Fire hydrant booster pumps, Pumps for <i>automatic</i> sprinkler systems.....</p> | <p>- If an electricity substation is proposed to be installed within the building compliance with (a) will be required.</p> <p>- The main switchboard must have an FRL of 120/120/120 in accordance with this clause and have any doorway in that construction protected with a <i>self-closing</i> fire door having an FRL of not less than –/120/30 to satisfy (b).</p> <p>- Electrical conductors if installed will be required to comply with clause (c).</p> <p>- Emergency equipment required by (d) must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear.</p> <p>(e) Noted.</p> |
| C2.14   | Public corridors in Class 2 and 3 buildings   | Compliance achieved, corridors are less than 40m long.   |
| <b>PART C3 – PROTECTION OF OPENINGS</b>       |   |  |
| C3.1<br>Application of Part                   | <p>(a) The <i>Deemed-to-Satisfy Provisions</i> of this Part do not apply to.....</p> <p>(b) For the purposes of the <i>Deemed-to-Satisfy Provisions</i> of this Part, openings in building elements <i>required</i> to be <i>fire-resisting</i> include ....doorways, windows etc.</p>  | Noted, This clause identifies Deemed to satisfy provisions that do and do not apply in addition to openings required to be protected in accordance with C3.2 and C3.4  |
| C3.2 Protection of openings in external walls | <p>Openings in an <i>external wall</i> that is <i>required</i> to have an FRL must—</p> <p>(a) if the distance between the opening and the <i>fire-source feature</i> to which it is exposed is less than— (i) 3 m from a side or rear boundary of the allotment; (ii) or (iii)</p>   | Noted, however not applicable as no openings have been identified that are less than that permitted in (a)(i),(ii) or (iii).   |
| C3.3  | Separation of external walls & associated openings in different fire compartments   | Compliance achieved as applicable.   |
| C3.4<br>Acceptable methods of protection      | <p>(a) Where protection is <i>required</i>, doorways, windows and other openings must be protected as follows:</p> <p>(i) Doorways—(A) internal or external wall-wetting sprinklers as appropriate used with doors that are <i>self-closing</i> or <i>automatic</i> (B) –/60/30 fire doors that are <i>self-closing</i> or <i>automatic</i> closing.</p> <p>(ii) Windows— (A) internal or external wall-wetting sprinklers as appropriate used with windows that are <i>automatic</i> closing or permanently fixed in the closed position; or (B) –/60/– fire windows that are <i>automatic</i> closing or permanently fixed in the closed</p>  | <p>- Compliance with (a) and (b) is required to protect openings within 6.0m of the path of travel from fire isolated stairs to Park Avenue to satisfy D1.7(c).</p> <p>- The proposed method of achieving compliance is to be submitted with the Construction Certificate.</p>   |

| BCA Clause  | Description of Requirement  | Status/Action Required  |
|---|---|---|
|   | <p>position; or (C) –/60/– <i>automatic</i> closing fire shutters.<br/>                     (iii) Other openings— (A) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or (B) construction having an FRL not less than –/60/–.<br/>                     (b) Fire doors, fire <i>windows</i> and fire shutters must comply with Specification C3.4.</p>   |   |
| <p>C3.5<br/>                     Doorways in fire walls</p>                 | <p>(a) The aggregate width of openings for doorways in a <i>fire wall</i>, which are not part of a <i>horizontal exit</i>, must not exceed <math>\hat{A}^{1/2}</math> of the length of the <i>fire wall</i>, and each doorway must be protected by— (i) or (ii) or (iii).<br/>                     (b) (i) A fire door or fire shutter <i>required</i> by (a)(i), (a)(ii) or (a)(iii) must be <i>self-closing</i>, or <i>automatic</i> closing in accordance with (ii) and (iii).<br/>                     (ii) The <i>automatic</i> closing operation must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located on each side of the <i>fire wall</i> not more than 1.5 m horizontal distance from the opening.<br/>                     (iii) Where any other <i>required</i> suitable fire alarm system, including a sprinkler system complying with Spec. E1.5 installed in the building, activation of the system in either <i>fire compartment</i> separated by the <i>fire wall</i> must also initiate the <i>automatic</i> closing operation.</p> | <p>- The required fire door in the ground floor fire walls separating the child care centre and residential part requires:<br/>                     (iii) a single fire door or fire shutter which has an FRL of not less than that <i>required</i> by Specification C1.1 for the <i>fire wall</i> except that each door or shutter must have an <i>insulation</i> level of at least 30 - to satisfy (a) (iii).<br/>                     - The required fire door in the abovementioned fire wall must comply with (b) as applicable.</p> |
| <p>C3.6, C3.7</p>   | <p>Sliding fire doors, Protection of doorways in horizontal exits</p>   | <p>Not applicable to the proposed development.</p>  |
| <p>C3.8 Openings in fire isolated exits</p>                                 | <p>(a) (i) Doorways that open to <i>fire-isolated stairways</i>, <i>fire-isolated passageways</i> or <i>fire-isolated ramps</i>, and are not doorways opening to a road or <i>open space</i>, must be protected by –/60/30 fire doors that are self closing in accordance with (ii) and (iii).<br/>                     (ii) The automatic closing..... (iii) Where any other required suitable fire alarm.....</p>   | <p>Fire isolated stairs are required to satisfy clause D1.3, subsequently doorways in all fire isolated exits must be protected by a minimum –/60/30 fire doors that are <i>self-closing</i>, or automatic-closing in accordance with (ii) (iii).</p>   |
| <p>C3.9 Service penetrations in fire isolated exits</p>                     | <p>Fire-isolated <i>exits</i> must not be penetrated by any services other than—<br/>                     (a) electrical wiring permitted by D2.7(e) to be installed within the <i>exit</i>; or<br/>                     (b) ducting associated with a pressurisation system if it— is constructed of material having an FRL of not less than –/120/60 where it passes through any other part of the building; and does not open into any other part of the building; or<br/>                     (c) water supply pipes for fire services.</p>   | <p>All penetrations in fire isolated stair walls and ceilings must be fire rated except as identified in (a), (b) and (c) of this clause as applicable.<br/>                     Details to be submitted with CC.</p>   |
| <p>C3.10<br/>                     Openings in fire isolated lift shafts</p> | <p>(a) Doorways — If a lift <i>shaft</i> is <i>required</i> to be fire-isolated, an entrance doorway to that <i>shaft</i> must be protected by –/60/– fire doors that— comply with AS 1735.11;<br/>                     (b) Lift indicator panels — A lift call panel, indicator panel or other panel in the wall of a fire-isolated lift <i>shaft</i> must be backed by construction having an FRL of not less than – /60/60 if it exceeds 35 000 mm<sup>2</sup> in area.</p>  | <p>- Compliance is required with (a) and (b) as applicable.<br/>                     - Lift doors must have a minimum FRL of –/60/–<br/>                     - Details to be submitted with CC.</p>   |

| BCA Clause  | Description of Requirement  | Status/Action Required  |
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| <p>C3.11<br/>Bounding<br/>Construction</p>                      | <p>(a) A doorway in a Class 2 building must be protected if it provides access from a SOU to<br/>                     (i) a <i>public corridor</i>, public lobby, or the like; or<br/>                     (ii) a room not within a SOU; or<br/>                     (iii) the landing of an internal required non <i>fire-isolated stairway</i>; or (iv) another SOU.<br/>                     (b) A doorway in a Class 2 or 3 building must be protected if it provides access from a room not within a SOU <i>unit</i> to—<br/>                     (i) a <i>public corridor</i>, public lobby, or the like; or<br/>                     (ii) the landing of an internal non <i>fire-isolated stairway</i> that serves as a <i>required exit</i>.<br/>                     (d) Protection for a doorway required under (a), (b) or (c) must be at least— (i) in a building of Type A construction — a self-closing <i>-/60/30</i> fire door; and (iv).....<br/>                     (e) Other openings in <i>internal walls</i> which are <i>required</i> to have an FRL with respect to <i>integrity</i> and <i>insulation</i> must not reduce the <i>fire-resisting</i> performance of the wall.</p> | <p>- Noted, compliance with (a), (b), (d) and (e) is required as applicable.<br/>                     - It is required that fire doors having an FRL of not less than <i>-/60/30</i> be provided to all sole occupancy units throughout, including to the ground floor cleaners WC, ground floor storage room and the doors between the child care centre and residential corridor if not constructed as a fire wall to satisfy C2.8.<br/>                     - All doorways as identified above must have minimum 850mm clear width when open to satisfy part D3.</p> |
| <p>C3.12<br/>Openings in floors &amp; ceilings for services</p> | <p>(a) Where a service passes through— a floor that is <i>required</i> to have an FRL with respect to <i>integrity</i> and <i>insulation</i>; or a ceiling <i>required</i> to have a <i>resistance to the incipient spread of fire</i>, the service must be installed in accordance with (b).<br/>                     (b) A service must be protected— in a building of Type A construction, by a <i>shaft</i> complying with Specification C1.1; or in accordance with C3.15.<br/>                     (c) Where a service passes through a floor which is <i>required</i> to be protected by a <i>fire-protective covering</i>, the penetration must not reduce the fire performance of the covering.</p>  | <p>Protection of all penetrations in fire rated building elements is required to be provided throughout in accordance with (a), (b) and (c).<br/><br/>                     Details to be submitted with CC.</p>   |
| <p>C3.13<br/>Openings in shafts</p>                             | <p>In a building of Type A construction, an opening in a wall providing access to a ventilating pipe, garbage or other service <i>shaft</i> must be protected by<br/>                     (a) or (b) a <i>self-closing -/60/30</i> fire door or hopper; or (c) an access panel having an FRL of not less than <i>-/60/30</i>; or<br/>                     (d) if the <i>shaft</i> is a garbage <i>shaft</i> a door or hopper of <i>non-combustible</i> construction.</p>  | <p>Protection is required with (a), (b), (c) &amp; (d) as applicable.<br/>                     Details to be submitted with Construction Certificate.</p>   |
| <p>C3.15<br/>Openings for service installations</p>             | <p>Where an electrical, electronic, plumbing, mechanical ventilation, air-conditioning or other service penetrates a building element that is <i>required</i> to have an FRL with respect to <i>integrity</i> or <i>insulation</i> or a <i>resistance to the incipient spread of fire</i>,</p>  | <p>That installation must comply with any one of the following:<br/>                     (a) Tested systems (b) Ventilation and air-cond.<br/>                     (c) Compliance with Spec.C3.15 (i),(ii), (iii), (iv).</p>  |
| <p>C3.16<br/>Construction joints</p>                            | <p>Construction joints, spaces and the like in and between building elements <i>required</i> to be <i>fire-resisting</i> with respect to <i>integrity</i> and <i>insulation</i></p>   | <p>Must be protected in a manner identical with a prototype tested in accord. with AS 1530.4 to achieve the <i>req.</i> FRL.</p>  |
| <p>C3.17</p>  | <p>Columns protected with lightweight construction to achieve an FRL</p>  | <p>Compliance required as applicable.</p>   |

| BCA Clause  | Description of Requirement  | Status/Action Required   |
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| PART C - SPECIFICATIONS                                 |   |  |
| <b>SPECIFICATION C1.1 – Fire Resisting Construction</b> |   |  |
| 2.1 Exposure to fire source features                    | (a) A part of a building element is exposed to a <i>fire-source feature</i> if any of the horizontal straight lines between that part and the <i>fire-source feature</i> , or vertical projection of the feature, is not obstructed by another part of the building that—<br>(i) has an FRL of not less than 30/-/-; and (ii) is neither transparent nor translucent.   | Noted, this clause identifies when a building element is or is not exposed, compliance required and appears to be achieved as applicable.  |
| 2.2 Fire protection for a support of another part       | (a) Where a part of a building <i>req.</i> to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part, subject to (b), must...<br>(b) The following building elements need not comply with (a)(ii) and (a)(iii)(B):<br>An element providing lateral support to an <i>external wall</i> complying with.....  | FRL's are to be satisfied as appropriate.<br>Details are to be submitted with CC.  |
| 2.3 Lintels   | A lintel must have the FRL <i>req.</i> for the part of the building in which it is situated, unless ...   | Lintels are to be fire rated as appropriate.   |
| 2.4 Attachments not to impair fire resistance           | (a) A <i>combustible</i> material may be used as a finish or lining to a wall or roof, or in a sign, sunscreen or blind, awning, or other attachment to a building element which has the <i>required</i> FRL if— (i) the material is exempted under C1.10 or complies with the <i>fire hazard properties</i> prescribed in Specification C1.10 and<br>(ii) it is not located near or directly above a <i>required exit</i> so as to make the <i>exit</i> unusable in a fire; and<br>(iii) it does not otherwise constitute an undue risk of fire spread via the facade of the building.<br>(b) The attachment of a facing or finish, or the installation of ducting or any other service, to a part of a building <i>req.</i> to have an FRL must not impair the <i>required</i> FRL of that part   | - Combustible attachments including timber panelling have not been identified, however if proposed in or on the façade of the building including privacy screens, sunshades, Aluminium Composite cladding Panels etc it must comply with (a) and (b) as applicable.<br>- Details confirming compliance with (a) and (b) is required to be submitted with the Construction Certificate if combustible materials are proposed as a finish or lining to a wall or roof, or in a sign, sunscreen or blind or awning or other attachment. |
| 2.5 General concessions                                 | (a) Steel columns — A steel column, other than one in a <i>fire wall</i> or <i>common wall</i> , need not have an FRL in a building that contains— (i) or (ii).<br>(b) Timber columns — A timber column may be used in a single <i>storey</i> building if—(i),(ii)<br>(c) Structures on roofs — A <i>non-combustible</i> structure situated on a roof need not comply with the other provisions of this Specification if it only contains— (i) or (ii)<br>(d) Curtain walls and panel walls — A requirement for an <i>external wall</i> to have an FRL does not apply to a <i>curtain wall</i> or <i>panel wall</i> which is of <i>non-combustible</i> construction and fully protected by <i>automatic</i> external wall-wetting sprinklers.<br>(f) Balconies and verandahs — A balcony, verandah or the like and any incorporated supporting part, which is attached to or forms part of a building, need not comply with Tables 3, 4 and 5 if— (i) and (ii). | Noted, compliance required with (a) to (f) inclusive as applicable.<br><br>Details are to be submitted with CC.  |

| BCA Clause  | Description of Requirement  | Status/Action Required  |
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| 2.6   | Mezzanine floors: concessions   | Not applicable to the proposed development.   |
| 2.7<br>Enclosure of shafts                                  | <i>Shafts required to have an FRL must be enclosed at the top and bottom by construction having an FRL not less than that required for the walls of a non- load-bearing shaft in the same building except that these provisions need not apply to (a) the top of a shaft extending beyond the roof covering, other than one enclosing a fire-isolated stairway or ramp; or (b) the bottom of a shaft if it is non-combustible and laid directly on the ground.</i>  | Will comply with (a) and (b) as appropriate.<br>Details are to be submitted with CC.  |
| 2.8, 2.9  | Car parks in class 2 & 3 buildings, Residential aged care building: Concession  | Not applicable to the proposed development.   |
| Type A - Fire Resisting Construction                        |   |   |
| C3.1 Fire resistance of building elements                   | In a building <i>required</i> to be of Type A construction—<br>(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<br>(b) <i>external walls, common walls</i> and the flooring and floor framing of lift pits must be <i>non-combustible</i> ; and<br>(c) any <i>internal wall required</i> to have an FRL with respect to <i>integrity</i> and <i>insulation</i> must extend to— (i) or (ii) or (iii) or (iv) and<br>(d) a <i>load-bearing internal wall</i> and a <i>load-bearing fire wall</i> (including those that are part of a <i>load-bearing shaft</i> ) must be constructed from (i) concrete; or (ii) masonry; or (iii) fire protected timber, provided that ..... or (iv) any combination of (i) to (iii).<br>(e) a non- <i>load-bearing-</i> (i) <i>internal wall required</i> to be <i>fire-resisting</i> ; and (ii) lift, ventilating, pipe, garbage, or similar <i>shaft</i> that is not for the discharge of hot products of combustion, must be of <i>non-combustible</i> construction; and<br>(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 <i>window</i> and are exposed through that <i>window</i> to a <i>fire-source feature</i> . | <ul style="list-style-type: none"> <li>- All building elements are to have an FRL complying with Table 3 as applicable including (a) to (f) inclusive.</li> <li>- All external walls are required to be non - combustible to satisfy (b)</li> <li>- All walls including external walls for the Class 2 and 7a and 9b parts including the basement level are to have an FRL not less than that required in Table 3 for load-bearing and non-load-bearing parts.</li> <li>- Refer to Annexure “A” to view Table 3.</li> <li>- Details are to be submitted with CC.</li> </ul> |
| C3.2  | Concessions for floors  | Not applicable to the proposed development.   |
| C3.3 Floor loading of Class 5 & 9b buildings:<br>Concession | If a floor in a Class 5 or 9b building is designed for a live load not exceeding 3 kPa—<br>(a) the floor next above (including floor beams) may have an FRL of 90/90/90; or<br>(b) the roof, if that is next above (including roof beams) may have an FRL of 90/60/30.  | <ul style="list-style-type: none"> <li>- Noted, this concession permits the floor above the Class 9b child care centre to have a reduced FRL if the live load does not exceed 3Kpa.</li> <li>- Details to be submitted with the Construction Certificate.</li> </ul>  |
| C3.4  | Roof superimposed on concrete slab: Concession  | Not applicable to the proposed development.   |

| BCA Clause   | Description of Requirement  | Status/Action Required   |
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| C3.5 Roof: Concession  | A roof need not comply with Table 3 if its covering is <i>non-combustible</i> and the building— (a) has a sprinkler system complying with Spec. E1.5 installed throughout; or (c) is of Class 2 ; or (d) has an EH of not more than 25 m and the ceiling immediately below the roof has a <i>resistance to the incipient spread of fire</i> to the roof space not less than 60 min.   | Noted, compliance is required with (a) or (c) or (d) as applicable if the concession is to be used.  |
| C3.6   | Roof lights   | Not applicable to the proposed development.  |
| C3.7 Internal columns and walls: Concession  | For a building with an EH of not more than 25 m and having a roof without an FRL in accord. with Clause 3.5, in the <i>storey</i> immediately below that roof, internal columns other than those referred to in Clause 3.1(f) and <i>internal walls</i> other than <i>fire walls</i> and <i>shaft walls</i> may have—(a) in a Class 2 or 3 building: FRL 60/60/60; (b) in a Class 5, 6, 7, 8 or 9 building—(i) with <i>rise in storeys</i> exceeding 3: FRL 60/60/60 (ii) with <i>rise in storeys</i> not exceeding 3: no FRL.. | Compliance with this concession is permitted as applicable.  |
| C3.8, C3.9, C3.10  | Open spectator stands and indoor sports stadiums: Concession, Car parks, Class 2 Bld.   | Not applicable to the proposed development.  |
| <b>SPECIFICATION C1.8 – Structural tests for lightweight construction</b>            |   |  |
| 1. Scope   | This Specification describes tests to be applied to and criteria to be satisfied by a wall system of <i>lightweight construction</i> .  | Noted, details to be submitted with the CC if lightweight construction is proposed.  |
| <b>SPECIFICATION C1.10 – Fire Hazard Properties- General</b>                         |   |  |
| 1. Scope   | This Specification sets out requirements in relation to the <i>fire hazard properties</i> of linings, materials & assemblies in Class 2 to 9 buildings as set out in Table 1.<br>ie: 2. Application, 3. Floor linings and floor coverings, 4. Wall and ceiling linings, 5. Air handling ductwork, 6. Lift cars and 7. Other materials   | Noted, compliance with the fire hazard properties of linings materials and assemblies as identified in sub-clause 2, 3, 4, 5, 6 and 7 is required as applicable ( including any proposed Aluminium Composite Panels) with details to be submitted with the Construction Certificate: |
| <b>SPECIFICATION C1.11 – Performance of External Walls in Fire</b>                   |   |  |
| 1.   | Scope   | Not applicable to the proposed development.  |
| <b>SPECIFICATION C1.13 – Cavity Barriers for Fire Protected Timber</b>               |   |  |
| 1. Scope   | This Specification sets out requirements for cavity barriers in <i>fire-protected timber</i> construction.  | Not applicable to the proposed development.  |
| <b>SPECIFICATION C2.5 – Smoke Proof Walls in Health Care and Aged Care Buildings</b> |   |  |
| 1. Scope   | This Specification sets out requirements for the construction of smoke-proof walls in .....   | Not applicable to the proposed development.  |



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| <b>SPECIFICATION C3.4 – Fire Doors, Smoke Doors, Fire Windows and Shutters</b>     |   |   |
| 1. Scope   | This Specification sets out requirements for the construction of fire doors, smoke doors, fire <i>windows</i> and fire shutters.  | Noted. Compliance required as applicable if required.   |
| 2. Fire doors  | A <i>required</i> fire door must comply with AS 1905.1; and not fail by radiation through any glazed part during the period specified for <i>integrity</i> in the <i>required</i> FRL.  | Any required fire door must comply with AS1905.1  |
| 3.   | Smoke Doors   | Not applicable to the proposed development.   |
| 4. Fire shutters   | (a) be a shutter that— (i), (ii) and (iii) or (b) be a steel shutter complying with AS 1905.2 if a metallic fire shutter is not prohibited by C3.5.   | Compliance required to protect openings, including to protect openings in the path of travel to satisfy D1.7(c).  |
| 5. Fire windows  | (a) identical in construction with a prototype that has achieved the <i>required</i> FRL; and (b) installed in same manner and in opening that is not larger than the tested prototype.   | Compliance required to protect openings, including to protect openings in the path of travel to satisfy D1.7(c).  |
| <b>SPECIFICATION C3.15 – Penetration of Walls, Floors and Ceilings by Services</b> |   |   |
| 1. Scope   | This Specification prescribes materials and methods of installation for services that penetrate walls, floors and ceilings <i>required</i> to have an FRL.<br>2. Application, 3. Metal pipe systems, 4. Pipes penetrating sanitary compartments, 5. Wires and cables, 6. Electrical switches and outlets, 7. Fire stopping.   | Noted. Compliance with sub-clause 2, 3, 4, 5, 6 and 7 is required as applicable.  |
| <b>SECTION D – Access and Egress</b>   |   |   |
| <b>PART D1 – PROVISION FOR ESCAPE</b>  |   |   |
| D1.2 Number of exits required  | (a) All buildings — Every building must have at least one <i>exit</i> from each <i>storey</i> .<br>(c) Basements - In addition to any <i>horizontal exit</i> , not < 2 <i>exits</i> must be provided from any <i>storey</i> if egress from that <i>storey</i> involves a vertical rise within the building of > 1.5 m unless (i) & (ii).<br>(d) Class 9 buildings — In addition to any <i>horizontal exit</i> , not less than 2 <i>exits</i> must be provided from the following: (i), (ii), (iii), (v)<br>(iv) Each <i>storey</i> in a Class 9b building used as an <i>early childhood centre</i> .<br>(vi) Any <i>storey</i> or <i>mezzanine</i> that accommodates more than 50 persons, calculated under D1.13.<br>(g) Access to exits — Without passing through another <i>sole-occupancy unit</i> every occupant of a <i>storey</i> or part of a <i>storey</i> must have access to—<br>(i) an <i>exit</i> ; or<br>(ii) at least 2 <i>exits</i> , if 2 or more <i>exits</i> are <i>required</i> | - Compliance is required with (a), (c), (d) and (g) as applicable and appears to be achieved throughout.<br>- The child care centre requires and has been provided with 2 exits from the each storey including Level 5.<br>- The gate on level 5 providing access from the child care centre part to the "alternate fire isolated stair" on the residential communal open space part of the storey must not be locked on the child care centre side of the doorway to ensure clear unobstructed access is provided to the required alternate fire isolated stair at all times.<br>- Access to fire isolated stairs on B1 from the garbage truck loading zone is required as ramp is 1:6 grade in lieu of 1:8.<br>- Final details confirming the proposed method of achieving compliance are to be submitted with the C. C |

| BCA Clause  | Description of Requirement   | Status/Action Required   |
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| D1.3<br>When Fire isolated exits are required         | (a) Class 2 and 3 buildings — Every stairway or ramp serving as a <i>required exit</i> must be fire-isolated unless it connects, passes through or passes by not more than — (i) 3 consecutive <i>storeys</i> in a Class 2 building; or<br>(b) Class 5 to 9 buildings — Every stairway or ramp serving as a <i>required exit</i> must be fire-isolated unless— (i), (ii) and (iii) in any other case it connects, passes through or passes by not more than 2 consecutive storeys and one extra storey of any classification may be included if (A) the building has a sprinkler system complying with Specification E1.5 installed throughout; or (B) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having – (aa) an FRL of -/60/60, if non - loadbearing; and (bb) an FRL of 90/90/90 for type A construction if loadbearing ; and (cc). | - Compliance appears to be achieved with (a) and (b) as fire isolated exits have been provided throughout, however the fire isolated stairs do not extend to Level 5 to provide direct access /egress from level 5, this will require an Alternative Solution to address the Performance Provisions as applicable.<br>- The basement stairs are not required to be fire isolated, however are proposed to be constructed as fire isolated stairs.            |
| D1.4<br>Exit travel distances                         | (a) Class 2 buildings— (i) The entrance doorway of any <i>sole-occupancy unit</i> must be not more than— (A) 6 m from an <i>exit</i> .....; or (B) 20 m from a single <i>exit</i> serving the <i>storey</i> at the level of egress to a road or <i>open space</i> ; and (ii) no point on the floor of a room which is not in a <i>sole-occupancy unit</i> must be more than 20 m from an <i>exit</i> or from a point at which travel in different directions to 2 <i>exits</i> is available.<br>(c) Class 5 to 9 buildings - Subject to (d), (e) and (f)- (i) no point on a floor must be more than 20 m from an <i>exit</i> , or a point from which travel in different directions to 2 <i>exits</i> is available, in which case the max. distance to one of those <i>exits</i> must not exceed 40 m;   | - Compliance with (a) and (c) is required and generally appears to be achieved throughout as applicable.<br>- Final details confirming maximum 6.0m to the exit is achieved on level 1, 2 and 4 is to be submitted with the Construction Certificate.  |
| D1.5 Distance between alternative exits.              | <i>Exits</i> that are <i>required</i> as alternative means of egress must be—<br>(a) distributed as uniformly as practicable within or around the <i>storey</i> served and in positions where unobstructed access to at least 2 <i>exits</i> is readily available from all points on the floor including lift lobby areas; and<br>(b) not less than 9 m apart; and<br>(c) not > (i) in a Class 2 building — 45m apart; or (iii) in all other cases — 60m apart; and<br>(d) located so that alternative paths of travel do not converge such that they become less than 6 m apart.  | - Compliance with (a), (b), (c) and (d) is required and generally appears to be achieved throughout.   |
| D1.6 Dimensions of exits and paths of travel to exits | Dimensions of exits and paths of travel to exits, minimum unobstructed width of not less than 1000mm and minimum unobstructed height of not less than 2000mm is to be provided throughout.<br>Compliance is required with (a) to (i) inclusive as applicable.  | - Compliance generally appears to be achieved throughout, however final details confirming all egress paths are minimum 1000mm clear width including ramps and stairs are to be submitted with the Construction Certificate.<br>- It must be noted that stairs (other than fire isolated stairs) and ramps require handrails in accordance with AS1428.1-2009 and must have complying circulation space, minimum 1000mm clear width and handrail extensions. |



| BCA Clause   | Description of Requirement   | Status/Action Required  |
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|  | having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if <i>req.</i> by the <i>DTS Provisions</i> of Part D3; or (ii) a stairway complying with the <i>DTS Provisions</i> of BCA.<br>(d) The discharge point of alternative <i>exits</i> must be located as far apart as practical.<br>(g) The number of persons accommodated must be calculated according to D1.13.  | and min.1000mm clear width.<br>-Tactile indicators are also required to all non fire isolated stairs and ramps in accordance with AS1428.4-2002.  |
| D1.11, D1.12   | Horizontal exits, Non required stairways, ramps/escalators   | Not applicable to the proposed development  |
| D1.13 Number of persons accommodated                 | For the purposes of the <i>Deemed-to-Satisfy Provisions</i> , the number of persons accommodated in a <i>storey</i> , room or <i>mezzanine</i> must be determined with consideration to the purpose for which it is used and the layout of the <i>floor area</i> by—<br>(a) calculating the sum of the numbers obtained by dividing the <i>floor area</i> of each part of the <i>storey</i> 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—<br>(i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and<br>(ii) service ducts and the like, <i>sanitary compartments</i> or other ancillary uses; or<br>(b) reference to the seating capacity in an <i>assembly building</i> or room; or<br>(c) any other suitable means of assessing its capacity. | - The childcare centre is 420m2 and in accordance with Table D1.13 can have 105 persons accommodated, however this may be reduced in accordance with (c) with limited numbers permitted with the childcare license.<br><br>- Final details on the number of occupants for the childcare centre are to be submitted with the Construction Certificate. |
| D1.14 Measurement                                    | The nearest part of an <i>exit</i> means in the case of— (a), (b), (c), (d) and (e)  | Noted, compliance achieved as applicable.   |
| D1.15 measurement                                    | The following rules apply: (a), (b), (c), (d), (e), (f), (g) and (h) inclusive.  | Noted, compliance required as applicable.   |
| D1.16 Plant rooms and lift machine rooms: Concession | (a) A ladder may be used in lieu of a stairway to provide egress from—(i) a plant room with a <i>floor area</i> of not more than 100 m2; or (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 m2. b) A ladder permitted under (a)— (i) or (ii) and (iii) and (iv)   | If applicable any proposed ladder must comply with AS1657.  |
| D1.17 Access to lift pits                            | Access to lift pits must—<br>(a) where the pit depth is not more than 3 m, be through the lowest landing doors; or<br>(b) where the pit depth is more than 3 m, be provided through an access doorway complying with the following.....(i)(ii)(iii)(iv)  | - Access to lift pits must comply with (a) and (b)(i) to (iv) inclusive.<br>- Final details to be submitted with the C.C.   |
| <b>PART D2 – CONSTRUCTION OF EXITS</b>               |  |   |
| D2.1 Application of Part                             | Except for (b) D2.13, D2.14(a), D2.16, D2.17(d), D2.17(e) and D2.18, the D-T-S Provisions of this Part do not apply to the internal parts of a SOU in a Class 2 building.  | Noted, Compliance is required throughout as applicable.   |
| D2.2 Fire isolated stairways and ramps               | A stairway or ramp (including any landings) that is <i>required</i> to be within a <i>fire-resisting shaft</i> must be constructed-(a) of <i>non-combustible</i> materials; and (b) so that if there is local failure it will not cause structural damage to, or impair the fire-resistance of the <i>shaft</i> .  | Noted, Compliance required with (a) and (b) as applicable for the proposed fire isolated stairs.  |

| BCA Clause   | Description of Requirement  | Status/Action Required  |
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| D2.3 Non-fire-isolated stairways and ramps         | In a building having a rise in storey's of more than 2, required stairs and ramps (including landings and any supporting building elements) which are not required to be within a fire resisting shaft, must be constructed according to D2.2, or only of (a), (b) or (c)   | Compliance required with (a), (b) and (c) as applicable, final details are to be submitted with the Construction Certificate confirming proposed method of compliance.  |
| D2.4, D2.5, D2.6                                   | Separation of rising/descending stair flights, Open access ramps/balconies, Smoke lobbies   | Not applicable to the proposed development.   |
| D2.7<br>Installations in exits and paths of travel | <p>(a) Access to service <i>shafts</i> and services other than to fire-fighting or detection equipment as permitted in the <i>Deemed to- Satisfy Provisions</i> of Section E, must not be provided from a <i>fire-isolated stairway</i>, <i>fire-isolated passageway</i> or <i>fire-isolated ramp</i>.</p> <p>(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 <i>required exit</i> or any corridor, hallway, lobby or the like leading to a <i>required exit</i>.</p> <p>(c) Gas or other fuel services must not be installed in a <i>required exit</i>.</p> <p>(d) Services or equipment comprising— electricity meters, distribution boards or ducts; central telecommunications distribution boards or equipment; electrical motors or other motors serving equipment in the building, may be installed in a <i>req. exit</i>, except for fire-isolated <i>exits</i> specified in (a); or in any corridor, hallway, lobby or the like leading to a <i>required exit</i>, if the services or equipment are enclosed by <i>non-combustible</i> construction or a <i>fire-protective covering</i> with doorways or openings suitably sealed against smoke spreading from the enclosure.</p> <p>(e) Electrical wiring may be installed in a fire-isolated <i>exit</i> if ...</p> | <p>Compliance with (a), (b), (c), (d) and (e) is required and generally appears to be achieved as applicable.</p> <p>Final details to be provided with Construction Certificate.</p>  |
| D2.8<br>Enclosure of space under stairs and ramps  | <p>(a) Fire-isolated stairways and ramps — If the space below a <i>required fire-isolated stairway</i> or <i>fire-isolated ramp</i> is within the fire-isolated <i>shaft</i>, it must not be enclosed to form a cupboard or similar enclosed space.</p> <p>(b) Non fire-isolated stairways and ramps — The space below a <i>required non fire-isolated stairway</i> (including an external stairway) or non <i>fire-isolated ramp</i> must not be enclosed to form a cupboard or other enclosed space unless—(i) and (ii)</p>   | Noted, compliance required with (a) and (b) as applicable.  |
| D2.9   | Width of stairways  | Not applicable to the proposed development.   |
| D2.10 Pedestrian ramps                             | <p>(a) A <i>fire-isolated ramp</i> may be substituted for a <i>fire-isolated stairway</i> if the construction enclosing the <i>ramp</i> &amp; the width &amp; ceiling height comply with the requirements for a fire isolated stairway.</p> <p>(b) A ramp serving as a <i>required exit</i> must—(i) where the ramp is also serving as an <i>accessible</i> ramp under Part D3, be in accordance with AS 1428.1; or (ii) in any other case, have a gradient not steeper than 1:8.</p> <p>(c) The floor surface of a ramp must have a slip-resistance classification not less than that listed in <u>Table D2.14</u> when tested in accordance with AS 4586</p>  | <ul style="list-style-type: none"> <li>- (a) is noted , however not applicable.</li> <li>- (b) requires ramps serving as required exits to comply with AS1428.1-2009 including tactile indicators and minimum 1000mm clear width between rails.</li> <li>- Compliance with (c) is required for all proposed floor and ramp surfaces.</li> <li>- Final details to be submitted with the C.C</li> </ul> |

| BCA Clause               | Description of Requirement  | Status/Action Required  |
|--------------------------|---|---|
| D2.11                    | Fire isolated passageways   | Not applicable to the proposed development.   |
| D2.12 Roof as open space | If an <i>exit</i> discharges to a roof of a building, the roof must—(a) have an FRL of not less than 120/120/120; and (b) not have any roof lights or other openings within 3 m of the path of travel of persons using the <i>exit</i> to reach a road or <i>open space</i> .   | The suspended slabs used for egress purposes from the discharge point of a fire isolated stair to the road is required to have an FRL of not less than 120/120/120 to satisfy (a).  |
| D2.13 Goings and risers  | <p>(a) A stairway must have - (i) not more than 18 nor less than 2 risers in each <i>flight</i>; and (ii) going (G), riser (R) and quantity (2R + G) in accordance with Table D2.13, except as permitted by (b) and (c); and (iii) constant goings and risers throughout each <i>flight</i>, except as permitted by (b) and (c), and the dimensions of goings (G) and risers (R) in accordance with (a)(ii) are considered constant if the variation between (A) adjacent risers, or between adjacent goings, is no greater than 5mm; and (B) the largest and smallest riser within a <i>flight</i>, or the largest and smallest going within a <i>flight</i>, does not exceed 10 mm; and (iv) risers which do not have any openings that would allow a 125 mm sphere to pass through between the treads; and (v) treads which have— (A) a surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; or (B) a nosing strip with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; and (vi) treads of solid construction (not mesh or other perforated material) if the stairway is more than 10 m high or connects more than 3 <i>storeys</i>; and (vii) in a Class 9b building, not more than 36 risers in consecutive <i>flights</i> without a change in direction of at least 30°; and (viii) in the case of a <i>required</i> stairway, no winders in lieu of a landing.</p> <p>(b) In the case of a non- <i>required</i> stairway—(i) and (ii) and (iii)</p> <p>(c) Where a stairway discharges to a sloping public walkway or public road— (i) and (ii).</p> | <p>- Noted, compliance with (a) (i) to (viii) is required throughout and generally appears to be achieved as applicable.</p> <p>- (b) is noted</p> <p>- (c) requires compliance as applicable.</p> <p>- Final details to be provided with Construction Certificate.</p> |
| D2.14 Landings           | <p>In a stairway (a) landings having a maximum gradient of 1:50 may be used in any building to limit the number of risers in each <i>flight</i> 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—(A) a surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; or (B) a strip at the edge of the landing with a slip-resistance classification not less than that listed in when tested in accordance with AS 4586, where the edge leads to a <i>flight</i> below;</p>  | <p>To be noted, compliance with (a)(i) and (ii) is required throughout and appears to be achieved as applicable.</p> <p>Details to be provided with CC</p>  |

| BCA Clause                                 | Description of Requirement  | Status/Action Required   |
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| <p>D2.15<br/>Thresholds</p>                | <p>The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless—<br/>                     (c) in a building <i>required</i> to be <i>accessible</i> by Part D3, the doorway- (i) opens to a road or <i>open space</i>; and (ii) is provided with a threshold or step ramp in accord. with AS 1428.1 or (e) in other cases— (i) the doorway opens to a road or open space, external stair landing or external balcony; and (ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.<br/>                     (e) in other cases—(i) the doorway opens to a road or open space, external stair landing or external balcony; and (ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.</p>  | <ul style="list-style-type: none"> <li>- Compliance required with as applicable and appears to be achieved throughout.</li> <li>- All doorways leading into the ground floor lobby must have level access or a threshold /step ramp as the doorways are a required accessway's which means a "continuous accessible path" as defined in AS1428.1-2009 to and within a building.</li> </ul>   |
| <p>D2.16<br/>Barriers to prevent falls</p> | <p>(a) A continuous barrier must be provided along the side of—<br/>                     (i) a roof to which general access is provided; and<br/>                     (ii) a stairway or ramp; and<br/>                     (iii) a floor, corridor, hallway, balcony, deck, verandah, <i>mezzanine</i>, access bridge or the like; and<br/>                     (iv) any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath.<br/>                     (b) The requirements of (a) do not apply to—<br/>                     (i) the perimeter of a <i>stage</i>, rigging loft, loading dock or the like; or (ii) areas referred to in D2.18; or<br/>                     (iii) a retaining wall unless the retaining wall forms part of, or is directly associated with a delineated path of access to a building from the road, or a delineated path of access between buildings; or<br/>                     (iv) a barrier provided to an openable window covered by D2.24.<br/>                     (c) A barrier <i>required</i> by (a) must be constructed in accordance with NSW Table D2.16a.1<br/>                     (d) Where a <i>required</i> barrier is constructed of wire, it is deemed to meet the requirements of Table D2.16a 2(c) if it is constructed in accordance with the following: (i), (ii) and (iii).</p> | <ul style="list-style-type: none"> <li>- Barriers are required to comply with (a), (b), (c) and (d) as applicable.</li> <li>- Barrier design details are to be in accordance with (a), (b), (c) and (d) with final details to be provided with the Construction Certificate.</li> <li>- Further details in particular for the proposed privacy screens and or full height louvres on balconies must not create a foothold ( horizontal element) between 150mm and 760mm above the floor to satisfy Clause 3 of Table D2.16a and should be located on the external side of the balustrade.</li> <li>- Final details to be submitted with the Construction Certificate.</li> </ul> |

| BCA Clause  | Description of Requirement  | Status/Action Required   |
|---|---|--|
| D2.17 Handrails   | <p>(a) Except for handrails ref. to in D2.18, handrails must be—<br/>                     (i) located along at least one side of the ramp or <i>flight</i>; and<br/>                     (ii) located along each side if the total width of the stairway or ramp is 2m or more; and<br/>                     (iv) in any other case, fixed at a height of not less than 865mm measured above the nosings of stair treads and the floor surface of the ramp, landing, or the like; and<br/>                     (v) continuous between stair <i>flight</i> landings and have no obstruction on or above them that will tend to break a hand-hold.<br/>                     (vi) in a <i>required exit</i> serving an area <i>req.</i> to be <i>accessible</i>, designed and constructed to comply with clause 12 of AS 1428.1.<br/>                     (c) Handrails <i>req.</i> to assist people with a disability must be provided in accord. with D3.3.<br/>                     (d) Handrails to a stairway or ramp within a SOU in a Class 2 building or part must— (i) and (ii) and (iii) and (iv).<br/>                     (e) The requirements of (d) do not apply to— (i), (ii), (iii) or (iv).</p> | <p>- Compliance is required with (a), (c), (d) &amp; (e) as applicable including but not limited to (a)(vi) and (c) for area's required to be accessible including the fire isolated stairs.<br/>                     - The access standards require all stairs except fire isolated stairs in accordance with D3.3(a)(iii). to satisfy the requirements for access for persons with a disability.<br/>                     - Subsequently handrails in common areas and non-fire isolated stairs or ramps ( including the section of stairs from level 5 to the fire isolated stairs) are required to be provided on both sides in accordance with AS1428.1-2009 and to ensure minimum 1000mm clear unobstructed width is achieved.</p> |
| D2.18<br>Fixed platforms, walkways, stairways and ladders | <p>A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail, balustrade or other barrier attached thereto may comply with AS 1657 in lieu of D2.13, D2.14, D2.16 and D2.17 if it only serves:<br/>                     (a) machinery rooms, boiler houses, lift-machine rooms, plant-rooms, and the like; or<br/>                     (b) non- <i>habitable rooms</i>, such as attics, storerooms and the like that are not used on a frequent or daily basis in the internal parts of a <i>sole-occupancy unit</i> in a Class 2 building.</p>  | <p>Compliance is required with (a) and (b) as applicable.</p>  |
| D2.19<br>Doorways and doors                               | <p>(b) A doorway serving as a <i>req. exit</i> or forming part of a <i>req. exit</i>, must not be fitted with a revolving door; and must not be fitted with a roller shutter or tilt-up door. (iii) must not be fitted with a sliding door unless it leads directly to a road or <i>open space</i>; and the door is able to be opened manually under a force of not more than 110 N; and (iv) if fitted with a door which is power-operated—(A) and (B).....<br/>                     (c) A power-operated door in a path of travel to a <i>required exit</i>, .....</p>  | <p>- Any power-operated door in a path of travel to a <i>required exit</i>, must be able to be opened manually under a force of not &gt; 110 N if there is a malfunction or failure of the power source; and if it leads directly to a road or <i>open space</i> 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 <i>fire compartment</i> served by the door to satisfy (c).</p>   |
| D2.20<br>Swinging doors.                                  | <p>A swinging door in a <i>required exit</i> or forming part of a <i>required exit</i><br/>                     (a) must not encroach at any part of its swing by more than 500 mm on the <i>required width</i> (including any landings) of a <i>required stairway</i>; or ramp; or passageway, if it is likely to impede the path of travel of the people already using the <i>exit</i>; &amp; when fully open, by &gt; 100mm on the <i>required width</i> of the <i>required exit</i>, &amp; the measurement of encroachment in each case is to include door handles or other furniture or attachments to the door; and<br/>                     (b) must swing in the direction of egress to satisfy (i) and (ii) and<br/>                     (c) must not otherwise impede the path or direction of egress.</p>  | <p>- Compliance with (a), (b) and (c) is required and generally appears to be achieved throughout.</p>   |



| BCA Clause                                 | Description of Requirement  | Status/Action Required  |
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| D2.21<br>Operation of latch                | (a) A door in a <i>required exit</i> , forming part of a <i>required exit</i> or in the path of travel to a <i>required exit</i> must be readily openable without a key from the side that faces a person seeking egress, by—(i) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area <i>required</i> to be <i>accessible</i> by Part D3— (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 (B) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or (ii) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor.<br>(b) The requirements of (a) do not apply to a door that— (i) or (ii), or (iii) or (iv).  | Noted, compliance is required with (a) as applicable and generally appears to be satisfied.   |
| D2.22                                      | Re - entry from fire isolated exits   | Not applicable to the proposed development.   |
| D2.23<br>Signs on doors                    | (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, a— (i) (A) <i>required</i> fire door providing direct access to a fire-isolated <i>exit</i> , except a door providing direct a <i>sole-occupancy unit</i> in a Class 2 building ; and (B) <i>required</i> smoke door, 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 either the wall adjacent to the doorway or both sides of the door; and (ii) (A) fire door forming part of a <i>horizontal exit</i> ; and (B) smoke door that swings in both directions; and (C) door leading from a fire isolated <i>exit</i> to a road or <i>open space</i> , on each side of the door.  | 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— (i) for an <i>automatic</i> door held open by an <i>automatic</i> hold open device—<br>“FIRE SAFETY DOOR—DO NOT OBSTRUCT”<br>or (ii) for a <i>self-closing</i> door—<br>“FIRE SAFETY DOOR DO NOT OBSTRUCT DO NOT KEEP OPEN” or<br>(iii) for a door discharging from a fire-isolated <i>exit</i> —<br>“FIRE SAFETY DOOR—DO NOT OBSTRUCT”. |
| D2.24<br>Protection of<br>Openable Windows | (a) A window opening must be provided with protection, if the floor below the window is 2m or more above the surface beneath in— (i) a bedroom in a Class 2 building or (ii) a Class 9b <i>early childhood centre</i> .<br>(b) 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:<br>(i) The openable portion of the window must be protected with—(A) a device capable of restricting the window opening; or (B) a screen with secure fittings.<br>(ii) A device or screen <i>required</i> by (i) must—(A) not permit a 125 mm sphere to pass through the window opening or screen;(B) resist an outward horizontal action of 250 N against the—(aa) window restrained by a device; or (bb) screen protecting the opening; and (C) have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden.<br>(c) A barrier with a height not less than 865 mm above the floor is <i>required</i> to an openable window— (i) in addition to window protection, when a child resistant screen | - Compliance with (a), (b), (c), (d) and (e) is required throughout all bedrooms and the childcare centre as applicable.<br>- Compliance with (c) and (d) is required to window openings other than those covered by (a).<br><br>- Details on the proposed method of achieving compliance with (a), (b), (c), (d) and (e) is required to be submitted with the application for the Construction Certificate.  |

| BCA Clause   | Description of Requirement  | Status/Action Required   |
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|  | <p>release mechanism is <i>required</i> by (b)(ii)(C); and (ii) where the floor below the window is 4m or more above the surface if the window is not covered by (a).</p> <p>(d) A barrier covered by (c) except for (e) must not—(i) permit a 125 mm sphere to pass through it; and (ii) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing.</p> <p>(e) A barrier <i>required</i> by (c) to an openable window in (i) <i>fire-isolated stairways or ramps</i> &amp; other areas used primarily for emergency purposes, excluding external stairways &amp; external ramps; &amp; (ii) Class 7 (other than <i>car parks</i>) &amp; Class 8 buildings and parts of buildings containing those classes; must not permit a 300mm sphere to pass through it.</p>   |  |
| <p>D2.25<br/>Timber stairways:<br/>Concession</p>            | <p>(a) Notwithstanding D2.2(a), timber treads, risers, landings and associated supporting framework which—</p> <p>(i) has a finished thickness of not less than 44 mm; and</p> <p>(ii) has an average density of not less than 800 kg/m<sup>3</sup> at a moisture content of 12%, may be used within a <i>required fire-isolated stairway or fire-isolated passageway</i> constructed from <i>fire-protected timber</i> in accordance with C1.13 subject to—</p> <p>(iii) the building being protected throughout by a sprinkler system complying with Specification E1.5 which extends to within the fire-isolated enclosure; and</p> <p>(iv) fire protection being provided to the underside of stair <i>flights</i> and landings located immediately above a landing level which— (A) is at or near the level of egress; or (B) provides direct access to a car park.</p> <p>(b) Fire protection required by (a) must be not &lt; one layer of 13 mm fire-protective grade plasterboard fixed in accord. with the system requirements for a <i>fire-protective covering</i>.</p> | <p>- The use of timber stairs is not proposed, however if proposed at Construction stage final details confirming compliance with (a) and (b) is to be submitted with the C.C.</p>   |
| <p><b>PART D3 – ACCESS FOR PEOPLE WITH DISABILITIES</b></p>  |   |  |
| <p>D3.1<br/>General building<br/>access<br/>requirements</p> | <p>Buildings and parts of buildings must be <i>accessible as required</i> by Table D3.1, unless exempted by D3.4.</p> <p>Access is required in:</p> <ul style="list-style-type: none"> <li>- Class 2 buildings from a pedestrian entrance required to be accessible to at least 1 floor containing SOU and to the entrance doorway of each SOU on that level.</li> <li>- Class 9b buildings - Schools and early childhood centres - To and within area's normally used by the occupants.</li> </ul> <p>Where a lift is provided – to the entrance doorway of each SOU located on the levels served by the lift.</p>   | <ul style="list-style-type: none"> <li>- Access in accordance with Table 3.1 is required to and within the car park, to and within the ground floor lobby and to the doorway of all sole occupancy units on all levels and to and within the childcare centre.</li> <li>- Clear width of 850mm when open is required to the childcare centre entry doorways, all SOU &amp; common area doorways including garbage rooms and all ground floor lobby entry doorways. Doorway's as identified also require circulation space both sides to be provided in accordance with AS1428.1-2009.</li> </ul> |

| BCA Clause  | Description of Requirement   | Status/Action Required  |
|---|--|---|
| <p>D3.2<br/>Access to buildings</p>                 | <p>(a) An <i>accessway</i> must be provided to a building <i>required</i> to be <i>accessible</i> from the main points of a pedestrian entry at the allotment boundary; and from any <i>required accessible</i> car parking space on the allotment.</p> <p>(b) In a building <i>required</i> to be <i>accessible</i>, an <i>accessway</i> must be provided through the principal pedestrian entrance, and (i) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and (ii) in a building with a total <i>floor area greater than</i> 500 m<sup>2</sup>, a pedestrian entrance which is not <i>accessible</i> must not be located more than 50 m from an <i>accessible</i> pedestrian entrance, except for pedestrian entrances serving only areas exempted by D3.4.</p> <p>(e) Where a doorway on an <i>accessway</i> has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm in accordance with AS 1428.1.</p>   | <ul style="list-style-type: none"> <li>- A continuous accessway is required and provided from the allotment boundary of Park Avenue to the childcare centre and the residential entry lobby and from the car park to satisfy (a) and is clearly visible to all occupants and or visitors in accordance with sub -clause (b)</li> <li>- The childcare and residential lobby entry doors require a minimum clear opening of 850mm when measured from the face of the opened door to the doorstop and circulation space both sides of the doorway in accordance with AS1428.1-2009. - Compliance with (b) and (e) is required as applicable.</li> </ul>  |
| <p>D3.3<br/>Parts of buildings to be accessible</p> | <p>In a building <i>required</i> to be <i>accessible</i>— (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 <i>fire-isolated ramp</i>, clause 10 of AS 1428.1; and (ii) for a stairway, except a <i>fire-isolated stairway</i>, clause 11 of AS 1428.1; and (iii) for a <i>fire-isolated stairway</i>, 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) <i>accessways</i> must have— (i) passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an <i>accessway</i> where a direct line of sight is not available; and (ii) turning spaces complying with AS 1428.1—(A) within 2 m of the end of <i>accessways</i> where it is not possible to continue travelling along the <i>accessway</i>; and (B) at maximum 20 m intervals along the <i>accessway</i>; and</p> <p>(d) an intersection of <i>accessways</i> 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) a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a <i>storey</i> or level other than the entrance <i>storey</i> in a Class 5, 6, 7b or 8 building—</p> <p>(i) containing not more than 3 <i>storeys</i>; and (ii) with a <i>floor area</i> for each <i>storey</i>, excluding the entrance <i>storey</i>, of not more than 200 m<sup>2</sup>; and</p> <p>(g) 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>(h) 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> | <ul style="list-style-type: none"> <li>- Compliance with (a) to (h) inclusive is required throughout and generally appears to be achievable within the building, however minor details and/or changes may be required to achieve full compliance with AS 1428.1-2009.</li> <li>- Ramps must comply with clause 10 of AS1428.1-2009.</li> <li>- Stairways except fire isolated stairs must comply with clause 11 of AS 1428.1 to satisfy (a)(ii).</li> <li>- Fire - isolated stairways must comply with Cl.11.1(f) &amp; (g) of AS 1428.1 to satisfy (a)(iii) &amp; have handrails complying with Clause 12 of AS1428.1-2009 to satisfy D2.17(a)(vi).</li> <li>- The lift must comply with E3.6 and be provided with floor dimensions minimum 1400mm wide x 1600mm deep to satisfy (b).</li> <li>- All public corridors on ground to level 4 inclusive require turning spaces 1.540m x 2.070m within 2.0m of the end of all corridors to satisfy (c)(ii) as applicable.</li> <li>- (d), (e) and (f) are noted.</li> <li>- any proposed carpet must comply with (g) and (h).</li> <li>- The childcare centre and all unit doorways, common area doorways including garbage room doorways must have a minimum 850mm clear unobstructed width.</li> <li>- Circulation space is required both sides of common area, childcare and garbage room doorways in accordance with AS1428.1-2009. - Final details to be submitted with CC</li> </ul> |

| BCA Clause  | Description of Requirement   | Status/Action Required   |
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| D3.4 Exemptions                                       | The following areas are not <i>required</i> to be <i>accessible</i> : (a) An area where access would be inappropriate because of the particular purpose for which the area is used. (b) An area that would pose a health or safety risk for people with a disability. (c) Any path of travel providing access only to an area exempted by (a) or (b).  | Noted, however not applicable to the proposed development except as identified in (a), (b) and/or (c).   |
| D3.5 Accessible car parking                           | <i>Accessible</i> car parking spaces—<br>(a) subject to (b), must be provided in accordance with Table D3.5 in—(i) a Class 7a building <i>required</i> to be <i>accessible</i> ; and<br>(c) subject to (d), must comply with AS/NZS 2890.6; and<br>(d) need not be designated where there is a total of not more than 5 car parking spaces, so as to restrict the use of the car parking space only for people with a disability.  | <ul style="list-style-type: none"> <li>- Compliance required as applicable, minor details and/or changes may be required to achieve full compliance with AS1428.1-2009 and AS2890.6. including minimum 2,500mm clear unobstructed height in accessible and shared car spaces.</li> <li>- Accessible car spaces will be required for adaptable units and minimum of 1 accessible car space for every 50 spaces for the childcare centre.</li> <li>- Final details are to be submitted with CC.</li> </ul> |
| D3.6 Signage  | In a building <i>required</i> to be <i>accessible</i> (a) (i) and (ii), (b) (i), (ii) and (iii), (c ), (d), (e) and (f)  | Compliance required with (a), (b), (c), (d), (e) and (f) as applicable. Final details to be submitted with the C.C.  |
| D3.7  | Hearing augmentation   | Not applicable to the proposed development.  |
| D3.8 Tactile indicators                               | (a) For a building <i>required</i> to be <i>accessible</i> , tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching— (i) a stairway, other than a <i>fire-isolated stairway</i> ; and (iv) a ramp other than a <i>fire-isolated ramp</i> , step ramp, kerb ramp and (v) in the absence of a suitable barrier an overhead obstruction less than 2 m above floor level, other than a doorway; and an <i>access way</i> meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D3.4, if there is no kerb or kerb ramp at that point, except for areas exempted by D3.4. | <ul style="list-style-type: none"> <li>- Compliance required and generally appears to be achieved as applicable, however minor details and/or changes may be required to achieve full compliance with AS 1428.1-2009.</li> <li>- Tactile indicators are also required to all non- fire isolated stairs.</li> <li>- Tactile ground surface indicators <i>required</i> by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1.</li> </ul>   |
| D3.9, D3.10, D3.11                                    | Wheelchair seating spaces in Class 9b assembly buildings, Swimming pools, Ramps  | Not applicable to the proposed development.  |
| D3.12 Glazing on an accessway                         | On an <i>accessway</i> , 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.   | Compliance required as applicable.   |
| <b>SPECIFICATION D3.6 – Braille and Tactile Signs</b> |  |  |
| 1. Scope  | This Specification sets out the requirements for the design and installation of braille and tactile signage as <i>required</i> by D3.  | Sub-clause 2, 3, 4, 5 and 6 is be noted and complied with as applicable.   |

| BCA Clause                                | Description of Requirement  | Status/Action Required  |
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| <b>SECTION E – Services and Equipment</b> |   |   |
| <b>PART E1 – FIRE FIGHTING EQUIPMENT</b>  |   |   |
| E1.3 Fire hydrants                        | <p>(a) A fire hydrant system must be provided to serve a building— (i) having a total <i>floor area</i> greater than 500 m<sup>2</sup>; &amp; (ii) where a <i>fire brigade</i> is available to attend a building fire.</p> <p>(b) The fire hydrant system—</p> <p>(i) must be installed in accordance with AS 2419.1, except a Class 8 electricity network substation need not comply with clause 4.2 of AS 2419.1 if— (A) and (B) and (ii) where internal fire hydrants are provided, they must serve only the <i>storey</i> on which they are located except that a <i>sole-occupancy unit</i>— (A) or (B).</p>   | <p>- Compliance required as applicable, fire hydrants are to be installed throughout to achieve coverage to all parts of the building, and the hydrant booster is to be located and protected in accordance with AS2419.1.</p> <p>- Final details are to be provided with the Construction Certificate.</p>   |
| E1.4<br>Fire hose reels                   | <p>(a) E1.4 does not apply to— (i) a Class 2 buildings; or (ii); or (iii); or (iv)....</p> <p>(b) A fire hose reel system must be provided— (i) to serve the whole building where one or more internal fire hydrants are installed; or (ii) where internal fire hydrants are not installed, to serve any <i>fire compartment</i> with a <i>floor area</i> greater than 500 m<sup>2</sup>.</p> <p>(c) The fire hose reel system must— (i) and (ii)</p> <p>(d) Fire hose reels must be located internally, externally or in combination, to achieve the system coverage specified in AS 2441.</p> <p>(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: (i) and (ii) and (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 <i>exit</i> to achieve the <i>required</i> coverage.</p> <p>(f) Fire hose reels must be located so that the fire hose will not need to pass through doorways fitted with fire or smoke doors, except— (i) ... and (ii) doorways in walls referred to in C2.12 or C2.13 separating equipment or electrical supply systems; and (iv) doorway openings to <i>shafts</i> referred to in C3.13.</p> <p>(g) Where the normal water supply cannot achieve the flow and pressures required by AS 2441, or is unreliable— (i) a pump; or (ii) water storage facility; or (iii) both a pump and water storage facility, must be installed to provide the minimum flow and pressures required by Clause 6.1 of AS 2441.</p> | <p>- Fire hose reels are required to be installed within 4.0m of exits within the car park in accordance with (a), (b), (c), (d), (e), (f), (g) and AS2441 as applicable.</p> <p>NOTE: BCA 2014 deleted the requirement for FHR in Class 2 parts, however Portable fire extinguishers must be provided so that the travel distance from the entrance doorway of any SOU to the nearest fire extinguisher is not more than 10m</p> |
| E1.5<br>Sprinklers                        | <p>A sprinkler system must—</p> <p>(a) be installed in a building or part of a building when <i>required</i> by Table E1.5; and</p> <p>(b) comply with Specification E1.5.</p>  | <p>- Table E1.5 requires sprinklers in accordance with AS2118 in a Class 7a building where more than 40 vehicles can be accommodated, compliance is required and proposed.</p>  |

| BCA Clause   | Description of Requirement  | Status/Action Required  |
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| E1.6 Portable fire extinguishers                   | <p>(a) Portable fire extinguishers must be –</p> <p>(i) provided as listed in Table E1.6; and</p> <p>(ii) for a Class 2 building, provided – (A) to serve the whole Class 2 building where one or more internal fire hydrants are installed; or (B) where internal fire hydrants are not installed, to serve any fire compartment with a floor area &gt;500 m<sup>2</sup>, &amp; for the purposes of this clause, a SOU in a Class 2 building is considered to be a fire compartment; &amp;</p> <p>(iii) subject to (b), selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444.</p> <p>(b) Portable fire extinguishers provided in a Class 2 building must be (i) an ABE type fire extinguisher ; and (ii) a minimum size of 2.5 kg; and (iii) distributed outside a SOU – (A) to serve only the storey at which they are located; &amp; (B) so that the travel distance from the entrance doorway of any SOU to the nearest fire extinguisher is not more than 10m.</p> | <p>Noted, compliance required as applicable with portable fire extinguishers to be provided to all residential levels in accordance with (a) and (b).</p>                               |
| E1.8 Fire control centres                          | <p>A fire control centre facility in accordance with Specification E1.8 must be provided for—</p> <p>(a) a building with an <i>effective height</i> of more than 25 m; and</p> <p>(b) a Class 6, 7, 8 or 9 building with a total <i>floor area</i> of more than 18 000 m<sup>2</sup>.</p>   | <p>Not applicable to the proposed development.</p>  |
| E1.9 Fire precautions during construction          | <p>In a building under construction not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each <i>storey</i> adjacent to each <i>required exit</i> or temporary stairway or <i>exit</i>; and after the building has reached an <i>effective height</i> of 12 m—</p> <p>(i) the <i>required</i> fire hydrants and fire hose reels must be operational in at least every <i>storey</i> that is covered by the roof or the floor structure above, except the 2 uppermost <i>storeys</i>; and</p> <p>(ii) any <i>required</i> booster connections must be installed.</p>   | <p>To be noted and complied with during construction</p>  |
| E1.10  | <p>Provision for special hazards</p>  | <p>Not applicable to the proposed development.</p>  |
| <b>SPECIFICATION E1.5 – Fire Sprinkler Systems</b> |   |   |
| 1. Scope   | <p>This Specification sets out requirements for the design and installation of fire sprinkler systems.</p>  | <p>Compliance with sub-clause 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13 is required as applicable for the sprinkler system as required in the car park in accordance with AS2118.1.</p> |
| <b>SPECIFICATION E1.8 – Fire Control Centres</b>   |   |   |
| 1. Scope   | <p>This Specification describes the construction and content of <i>required</i> fire control centres and rooms.</p>   | <p>Not applicable to the proposed development, as the building is less than 25m in Effective Height.</p>  |

| BCA Clause   | Description of Requirement   | Status/Action Required  |
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| <b>PART E2 – SMOKE HAZARD MANAGEMENT</b>                       |  |   |
| E2.1<br>Application of Part                                    | (a) The Deemed-to-Satisfy Provisions of this Part do not apply to - (i) any open deck carpark; or (iii) a Class 8 electricity network substation with a floor area not more than 200 m <sup>2</sup> , located within a multi-classified building.<br>(b) The smoke exhaust and smoke-and-heat vent provisions of this Part do not apply to any area not used by occupants for an extended period of time such as a storeroom with a floor area less than 30 m <sup>2</sup> , sanitary compartment, plant room or the like.   | Noted. Compliance required as applicable  |
| E2.2<br>General requirements                                   | (a) A building must comply with (b), (c), (d) and (i) Table E2.2a as applicable to Class 2 to 9 buildings such that each separate part complies with the relevant provisions for the classification; and<br>(b) An air-handling system which does not form part of a SHM system in accordance with Table E2.2a or E2.2b and which recycles air from one <i>fire compartment</i> to another <i>fire compartment</i> or operates in a manner that may unduly contribute to the spread of smoke from one <i>fire compartment</i> to another <i>fire compartment</i> must— (i) or (ii)<br>(c) Miscellaneous air-handling systems covered by Sections 5 and 11 of AS/NZS 1668.1 serving more than one <i>fire compartment</i> and not forming part of a smoke hazard management system must comply with that Section of the Standard.<br>(d) A smoke detection system must be installed in accordance with Clause 5 of Specification E2.2a to operate AS/NZS 1668.1 systems that are provided for zone smoke control and <i>automatic</i> air pressurisation for fire-isolated <i>exits</i> . | -To be noted and complied with as applicable.<br>- Details to be submitted with CC.<br><u>Table E2.2a requires:</u><br>1) Fire stairs serving any storey above 25m to be provided with stair pressurization. ( Not applicable )<br>2) Fire stairs serving more than 2 below ground storey's not counted in the rise in storey's to be provided with stair pressurization. ( Not applicable ).<br>3. Class 2 parts to be provided with automatic smoke detection in accordance with Spec. E2.2a. ( applicable)<br>Class 9b parts to be provided with an automatic smoke detection & alarm system in accordance with Spec. E2.2a or a sprinkler system to satisfy Table E2.2a ( applicable )<br>5. The basement carpark is to be provided with mechanical ventilation in accordance with AS/NZS 1668.1 (applicable) |
| E2.3 Provision for special hazards                             | Additional smoke hazard management measures may be necessary due to the special mix of class's within a Bld. or <i>fire compart</i> , which are not addressed in TableE2.2a/ E2.2b.  | - To be noted and complied with as applicable as identified above in clause E2.2 above.<br>- Table E2.2a requires in buildings with rise of more than 2 storeys and having a Class 9b part to be provided with (i) stair pressurisation or (ii) Zone smoke control or (iii) An Automatic smoke detection and alarm system to Spec.E2.2a or (iv) a sprinkler system.   |
| <b>SPECIFICATION E2.2a – Smoke detection and alarm systems</b> |  |   |
| 1. Scope   | This Specification describes the installation and operation of <i>automatic</i> smoke detection and alarm systems.   | To be noted and complied with as applicable.  |

| BCA Clause                   | Description of Requirement   | Status/Action Required  |
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| 2.<br>Type of system         | <p>A required automatic smoke detection and alarm system must comply with the following:</p> <p>(a) Class 2 buildings : (i) Subject to (ii), a Class 2 building must be provided with—(A) a smoke alarm system complying with Clause 3; or (B) a smoke detection system complying with Clause 4; or (C) a combination of a smoke alarm system complying with Clause 3 within <i>sole-occupancy units</i> and a smoke detection system complying with Clause 4 in areas not within the <i>sole-occupancy units</i>.</p> <p>(b) Class 5, 6, 7, 8 &amp; 9b buildings: A smoke detection system complying with Clause 4.</p>   | <ul style="list-style-type: none"> <li>- To be noted and complied with as applicable.</li> <li>- Class 2 - Minimum to be provided is a smoke alarm system complying with clause 3 (AS3786), however compliance with clause 4 (AS1670) is also permitted.</li> <li>- Class 9b - Minimum to be provided is a smoke alarm system complying with clause 4 (AS1670)</li> <li>- Details to be submitted with Construction Certificate.</li> </ul> |
| 3.<br>Smoke alarm system     | <p>(a) A smoke alarm system must (i) consist of smoke alarms complying with AS 3786; and (ii) be powered from the consumers mains source.</p> <p>(b) In kitchens and other areas where the use of the area is likely to result in smoke alarms causing spurious signals— (i) any other alarm deemed suitable in accordance with AS 1670.1 may be installed provided that smoke alarms are installed elsewhere in the <i>sole-occupancy unit</i> in accordance with Clause 3(c)(i); or (ii) an alarm acknowledgement facility may be installed, except where the kitchen or other area is sprinklered, the alarms need not be installed in the kitchen or other areas likely to result in spurious signals.</p> <p>(c) In a Class 2 building, smoke alarms must be installed (i) within each SOU, interconnected and located on or near the ceiling in any <i>storey</i> (A) containing bedrooms—(aa) between each part of the SOU containing bedrooms and the remainder of the SOU (bb) where bedrooms are served by a hallway, in that hallway; and (B) not containing any bedrooms, in egress path</p> | <p>To be noted and complied with as applicable.</p> <p>Minimum to be provided is a smoke alarm system complying with clause 3 in the Class 2 portion.</p> <p>Details to be submitted with CC</p>  |
| 4.<br>Smoke detection system | <p>(a) A smoke detection system must—(i) subject to (c) and (d), comply with AS 1670.1 except for the provisions of—(A) Clause 3.26(f); and (ii) activate a building occupant warning system in accordance with Clause 6.</p> <p>(b) In kitchens and other areas where the use of the area is likely to result in smoke detectors causing spurious signals—(i) any other detector deemed suitable in accordance with AS 1670.1 may be installed provided that smoke detectors are installed elsewhere in the SOU in accordance with Clause 3(c)(i); or (ii) an alarm acknowledgement facility may be installed, except where the kitchen or other area is sprinklered, the detectors need not be installed in the kitchen or other areas likely to result in spurious signals.</p> <p>(c) In a Class 2 building smoke detectors must be installed—(i) within each SOU, in accordance with the requirements for alarms in clause 3(c)(i) and (ii) in a building not protected with a sprinkler system, in public corridors and other internal spaces.</p>   | <p>To be noted, compliance with (a), (b) and (c) is required as applicable for the Class 9b child care centre.</p> <p>Details to be submitted with CC</p>   |
| 5.                           | Smoke detection for smoke control systems  | Noted, not applicable to the proposed development.  |



| BCA Clause   | Description of Requirement   | Status/Action Required   |
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| 6.<br>Building occupant warning system             | Subject to E4.9, a building occupant warning system provided as part of a smoke hazard management system must comply with Clause 3.22 of AS 1670.1 to sound through all occupied areas except— (a) in a Class 2 building provided with a smoke alarm system in accordance with Clause 3(c)(ii) — (i) and (ii) and (b) in a Class 2 building provided with a smoke detection system in accordance with Clause 4(c), the sound pressure level from a warning system need not be measured within a SOU if a level of not less than 100 dB(A) is provided at the door providing access to the SOU; | To be noted and complied with as applicable.   |
| 7.   | System monitoring  | Not applicable to the proposed development.  |
| <b>SPECIFICATION E2.2b – Smoke exhaust systems</b> |  |  |
| 1. Scope   | This Specification describes the requirements for mechanical smoke exhaust systems.  | Noted, not applicable to the proposed development.   |
| <b>PART E3 – LIFT INSTALLATIONS</b>                |  |  |
| E3.1 Lift Installations                            | An <u>electric passenger lift</u> installation and an <u>electrohydraulic passenger lift</u> installation must comply with <u>Specification E3.1</u> .   | Compliance required as applicable.   |
| E3.2 Stretcher facility in lifts                   | (a) A stretcher facility in accordance with (b) must be provided— (i) in at least one emergency lift <i>required</i> by E3.4; or (ii) where an emergency lift is not <i>required</i> , if passenger lifts are installed to serve any storey above an <i>effective height</i> 12 m, in at least one of those lifts to serve each floor served by the lifts.<br>(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 x 2000 mm long x 1400 mm high above the floor level.                   | - Compliance required with (a)(ii) as the lifts serve a storey above an effective height of 12m.<br>- Stretcher facilities in accordance with (b) are required to be provided in the lifts ( min. 600mm wide x 2000mm long x 1400mm high ) to satisfy (a) and (b).                           |
| E3.3   | Warning against use of lifts in fire   | Warning signs must be provided in accordance (a) and (b).  |
| E3.4   | Emergency Lifts  | Not applicable to the proposed development.  |
| E3.5 Landings                                      | Access/egress to & from lift well landings must comply with the DTS <i>Provisions</i> of Sect .D   | Compliance with this clause is required as applicable.   |
| E3.6 Passenger lifts                               | In an <i>accessible</i> building, every passenger lift must—<br>(a) be one of the types identified in Table E3.6a, subject to the limitations on use specified in the Table; and<br>(b) have <i>accessible</i> features in accordance with Table E3.6b; and<br>(c) not rely on a constant pressure device for its operation if the lift car is fully enclosed.   | - Passenger lifts are required for persons with a disability in accordance with Table E3.6a with features provided in accordance with Table E3.6b. including minimum floor dimensions of all lifts of not less than 1400mm wide x 1600mm deep. (2000mm stretcher facility to satisfy E3.2 ). |

| BCA Clause  | Description of Requirement   | Status/Action Required  |
|---|--|---|
| E3.7 Fire service controls  | Where lifts serve any <i>storey</i> above an <i>effective height</i> of 12m, the following must be provided: (a) A fire control switch complying with E3.9 for— (i) or (ii) .<br>(b) A lift car fire service drive control switch complying with E3.10 for every lift.   | Noted, compliance required with (a) and (b) as applicable as the lift serves a storey above an Effective height of 12m.                           |
| E3.8 ,  | Aged care buildings  | Not applicable to the proposed development.   |
| E3.9 Fire Service Recall Operation Switch                           | (a) Each group of lifts must be provided with one fire service recall control switch <i>required</i> by E3.7 that activates the fire service recall operation at (e).The switch must(i),(ii),(iii),(iv).<br>(b) Adhesive labels must not be used for compliance with (a)(ii) and (a)(iii).<br>(c) The key in (a)(iv) must be able to turn all fire service recall control switches in the building and must have different key combination to other keys used for lifts in the bld.<br>(d) The fire service recall operation must be activated by— (i) or (ii).<br>(e) The activation of the fire service recall operation at (d) must (i),(ii),(iii),(iv),(v),(vi),(vii)<br>(f) The requirements of (e) do not apply to lifts on inspection service or when the lift car fire service control switch <i>required</i> by E3.10 is in the "ON" position.<br>(g) Lifts having manual controls must signal an alert to the lift for the lift to return to the nominated floor containing the recall switch that activated the signal. | - Compliance required with (a), (b), (c), (d), (e), (f) and (g) as applicable as the lift serves a storey above an effective height of 12m.       |
| E3.10 Lift Car Fire Service Drive Control Switch                    | (a) The lift car fire service drive control switch <i>required</i> by E3.7 must be activated from within the lift car. The switch must— (i), (ii), (iii) and (iv).<br>(b) Adhesive labels must not be used for compliance with (a)(ii) or (a)(iii).<br>(c) When the lift car fire service drive control switch at (a) is turned to the "ON" position, the lift must— (i), (ii), (iii), (iv), (v), (vi), (vii), (viii) and (ix).<br>(d) A multi-deck lift installation must have systems in place that—(i), (ii) and (iii).   | Noted, compliance required as applicable as the lift serves a storey above an Effective Height of 12m.  |
| <b>Specification E3.1 – Lift Installations</b>                      |  |   |
| 1. Scope  | This Specification contains requirements for <i>electric passenger lift</i> installations and <i>electrohydraulic passenger lift</i> installations.  | Compliance with the requirements of clause 2, 3, 4, 5 and 6 is required as applicable.  |
| <b>PART E4 – EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS</b> |  |   |
| E4.2 Emergency Lighting requirements                                | An emergency lighting system must be installed—<br>(a) in every <i>fire-isolated stairway, fire-isolated ramp or fire-isolated passageway</i> ; and<br>(b) in every <i>storey</i> of a Class 5, 6, 7, 8 or 9 building where the <i>storey</i> has a <i>floor area</i> more than 300 m <sup>2</sup> — (i), (ii) and (iii)<br>(c) in every passageway, corridor, hallway, or the like, having a length of more than 6 m from the entrance doorway of any <i>sole-occupancy unit</i> in a Class 2 building to the nearest doorway opening directly to(i), (ii), (iii) and (iv), (d) in every <i>req. non fire-isolated stairway</i> ;   | Emergency lighting must be provided in accordance with AS 2293 as required by (a), (b), (c ) and (d).<br><br>Details to be submitted with the CC. |

| BCA Clause   | Description of Requirement   | Status/Action Required  |
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| E4.3 Measurement of distance                             | Distances, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.  | Compliance required as applicable.  |
| E4.4   | Design and operation of emergency lighting   | Emergency lighting must be provided throughout in accordance with AS2293.1.   |
| E4.5   | Exit signs   | Exit signage is required to be installed throughout in accordance with AS 2293.   |
| E4.6 Directional signs                                   | If an <i>exit</i> is not readily apparent to persons occupying or visiting the building then <i>exit</i> signs must be installed – (a) in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a <i>required exit</i> ;  | Directional Exit signage is required to be installed in accordance with AS 2293. Details to be submitted with the CC.                   |
| E4.7 Class 2 & 3 buildings and Class 4 parts: Exemptions | E4.5 does not apply to— (a) a Class 2 building in which every door referred to is clearly and legibly labelled on the side remote from the <i>exit</i> or balcony— (i) with the word “EXIT” in capital letters 25 mm high in a colour contrasting with that of the background; or (ii) by some other suitable method; and (b) an entrance door of a SOU in a Class 2 building. | Noted, this exemption is able to be used for the proposed development.  |
| E4.8 Design and operation exit signs                     | Every <i>required exit</i> sign must comply with AS 2293.1 or (b) for Photoluminescent exit signs Specification E4.8 and be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.  | All Exit signage is to be designed and installed in accordance with AS 2293. Details to be submitted with the Construction Certificate. |
| E4.9   | Sound systems and intercom systems for emergency purposes  | Not applicable to the proposed development.   |
| <b>Specification E4.8 – Photoluminescent Exit Signs</b>  |  |   |
| 1. Scope   | This Specification contains requirements for photoluminescent <i>exit</i> signs.   | Noted and compliance required as applicable.  |
| 2. Application   | A photoluminescent <i>exit</i> sign must comply with Section 6 and Appendix D of AS 2293.1, except where varied by this Specification.   | Compliance required as applicable.  |
| 3. Illumination  | A photoluminescent <i>exit</i> sign must — (a) and (b) and (c)   | Compliance required with (a), (b) and (c) as applicable.  |
| 4. Pictorial elements                                    | Pictorial elements on a photoluminescent <i>exit</i> sign must— (a) where the colour white is used, be replaced with a photoluminescent material; and (b) be not less than 1.3 times larger than that specified in Table 6.1 of AS 2293.1; and (c) have a border of photoluminescent material that extends not less than 15 mm beyond the pictorial elements.                  | Compliance required with (a), (b) and (c) as applicable.  |
| 5. Viewing distance                                      | The maximum viewing distance in clause 6.6 of AS 2293.1 must not be more than 24 m.  | Compliance required as applicable.  |
| 6. Smoke control systems                                 | Smoke control systems required by clause 6.3 of AS 2293.1 do not apply to a photoluminescent <i>exit</i> sign.   | Compliance required as applicable.  |

| BCA Clause                                  | Description of Requirement  | Status/Action Required   |
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| <b>SECTION F – Health and Amenity</b>       |   |  |
| <b>PART F1 – DAMP AND WATERPROOFING</b>     |   |  |
| F1.1 Stormwater                             | Stormwater drainage must comply with AS/NZS 3500.3.   | Compliance required as applicable.   |
| F1.4 External Above Ground Membranes        | <i>Waterproofing</i> membranes for external above ground use must comply with AS 4654 Parts 1 and 2.  | Compliance required as applicable.   |
| F1.5 Roof coverings                         | A roof must be covered with coverings complying with (a),(b), (c),(d),(e),and (f) inclusive as applicable.  | Roof coverings must be manufactured and installed in accordance with the nominated Australian Standards in sub-clause (a) – (f) inclusive.                       |
| F1.6 Sarking                                | <i>Sarking-type materials</i> used for weatherproofing of roofs and walls.  | Must comply with AS/NZS 4200 Parts 1 and 2.  |
| F1.7 Waterproofing of wet areas.            | Waterproofing of wet areas in buildings must be completed in accordance with (a), (b), (c) (d) and (e) as applicable.   | Waterproofing to be installed in accordance with AS3740 Details to be submitted with CC  |
| F1.9 Damp proofing                          | (a) Except for a building covered by (c), moisture from the ground must be prevented from reaching— (i), (ii) and (iii).<br>(b) Where a damp-proof course is provided, it must consist of (i) a material that complies with AS/NZS 2904; or (ii) impervious sheet material in accordance with AS 3660.1.<br>(c) The following buildings need not comply with (a): (i) A Class 7 or 8 building where in the particular case there is no necessity for compliance. (ii) A garage, tool shed, <i>sanitary compartment</i> , or the like, forming part of a building used for other purposes. (iii) An <i>open spectator stand</i> or <i>open-deck car park</i> . | Where a damp-proof course is provided, it must consist of a material that complies with AS/NZS 2904; or impervious termite shields in accordance with AS 3660.1. |
| F1.10 Damp proofing of floors on the ground | 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, except damp-proofing need not be provided if weatherproofing is not <i>required</i> ; or the floor is the base of a stair, lift or similar <i>shaft</i> which is adequately drained by gravitation or mechanical means.  | To be noted and complied with as applicable.   |
| F1.11 Provision of floor wastes             | In a Class 2 building, a bathroom or laundry located at any level above a SOU or public space must have a floor waste and the floor graded to the floor waste to permit drainage of water.  | To be noted and complied with as applicable.   |
| F1.12                                       | Sub floor ventilation includes (a), (b), (c), (d) and (e)   | Not applicable to the proposed development.  |
| F1.13 Glazed assemblies                     | (a) Subject to (b) and (c), the following glazed assemblies in an <i>external wall</i> , must comply with AS 2047 requirements for resistance to water penetration: Windows, Sliding doors with a frame, Adjustable louvers, Shopfronts, Window walls.  | Glazing must comply with AS2047 as applicable.   |

| BCA Clause   | Description of Requirement   | Status/Action Required   |
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| <b>Part F2 - Sanitary and other facilities</b>         |  |  |
| F2.1 Facilities in residential buildings               | <p>Sanitary and other facilities for Class 2 buildings must be provided in accordance with Table F2.1.</p> <p>- Table F2.1 also requires facilities for employees if the building contains more than 10 SOU's: Facilities consisting of a closet pan and washbasin in a compartment or room at or near ground level is to be accessible to service employees.</p>  | <p>- Table F2.1 requires provision of clothes drying facilities consisting of a clothes line or space for one heat-operated drying cabinet or appliance in the same room as the clothes washing machine in each Class 2 SOU .</p> <p>- An employees WC is required at or near ground level to satisfy Table F2.1 and is located on the ground floor.</p>   |
| F2.2 Calculation of number of occupants and facilities | <p>(a) The number of persons accommodated must be calculated according to D1.13 if it cannot be more accurately determined by other means.</p> <p>(b) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females.</p> <p>(c) In calculating the number of sanitary facilities to be provided under F2.1 and F2.3, a unisex facility <i>required</i> for people with a disability may be counted once for each sex.</p> <p>(d) For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary towels.</p>  | <p>The final number of persons accommodated is to be calculated in accordance with (a), (b), (c) or (d) with details to be submitted with the Construction Certificate.</p>  |
| F2.3 Facilities in class 3 to 9 buildings              | <p>(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.</p> <p>(b) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex.</p> <p>(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.</p> <p>(d) Employees and the public may share the same facilities in a Class 6 and 9b building (other than a <i>school</i> or <i>early childhood centre</i>) provided the number of facilities provided is not less than the total number of facilities <i>required</i> for employees plus those <i>required</i> for the public.</p> <p>(e) Adequate means of disposal of sanitary towels must be provided in sanitary facilities for use by females.</p> <p>(h) A Class 9b <i>early childhood centre</i> must be provided with—</p> <p>(i) a kitchen or food preparation area with a kitchen sink, separate hand washing facilities, space for a refrigerator and space for cooking facilities, with—</p> | <p>- Compliance is required with (a) to (i) inclusive as applicable.</p> <p>- separate facilities for males and females to be provided to satisfy (a)</p> <p>- A unisex facility can be provided for employees subject to the requirements of (b).</p> <p>- Compliance with (c) required as applicable</p> <p>- Compliance with (d) is required as applicable.</p> <p>- Disposal of sanitary towels in female sanitary facilities is required to satisfy (e)</p> <p>- The childcare centre must be provided with (i) to (iii) inclusive to satisfy (h).</p> <p>- compliance required with (i) as applicable.</p> |

| BCA Clause                                     | Description of Requirement   | Status/Action Required  |
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|  | <p>(A) the facilities protected by a door or gate with child proof latches to prevent unsupervised access to the facilities by children younger than 5 years old; and</p> <p>(B) the ability to facilitate supervision of children from the facilities if the early childhood centre accommodates children younger than 2 years old; and</p> <p>(ii) one bath or shower-bath; and</p> <p>(iii) if the centre accommodates children younger than 3 years old—</p> <p>(A) a laundry facility comprising a washtub and space in the same room for a washing machine; and</p> <p>(B) a bench type baby bath, which is within 1 m of the nappy change bench; and</p> <p>(C) a nappy changing bench which—</p> <p>(aa) is within 1 m of separate adult hand washing facilities and bench type baby bath; and</p> <p>(bb) must be not less than 900 mm<sup>2</sup> in area and at a height of not less than 850 mm, but not more than 900 mm above the finished floor level; and</p> <p>(cc) must have a space not less than 800 mm high, 500 mm wide and 800 mm deep for the storage of steps; and</p> <p>(dd) is positioned to permit a staff member changing a nappy to have visibility of the play area at all times.</p> <p>(j) Not &lt; one washbasin must be provided where closet pans or urinals are provided.</p> | <p>- Final details demonstrating the proposed method of achieving compliance with (a) to (i) inclusive is to be submitted with the Construction Certificate.</p>  |
| <p>F2.4<br/>Accessible sanitary facilities</p> | <p>In a building <i>required to be accessible</i>—</p> <p>(a) <i>accessible unisex sanitary compartments</i> must be provided in <i>accessible</i> parts of the building in accordance with Table F2.4(a); and</p> <p>(b) <i>accessible unisex showers</i> must be provided in accordance with Table F2.4(b); and</p> <p>(c) at each bank of toilets where there is one or more toilets in addition to an <i>accessible unisex sanitary compartment</i> at that bank of toilets, a <i>sanitary compartment</i> suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females; and</p> <p>(d) an <i>accessible unisex sanitary compartment</i> must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels; and</p> <p>(e) the circulation spaces, fixtures and fittings of all <i>accessible</i> 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</p>   | <p>- An accessible sanitary facility is required to be provided within the child care centre to satisfy (a) to (i) inclusive.</p> <p>- Final details to be submitted with the Construction Certificate.</p> |

| BCA Clause  | Description of Requirement   | Status/Action Required  |
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|   | <p>(f) an <i>accessible</i> unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and</p> <p>(g) where two or more of each type of <i>accessible</i> unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and</p> <p>(h) where male sanitary facilities are provided at a separate location to female sanitary facilities, <i>accessible</i> unisex sanitary facilities are only <i>required</i> at one of those locations; and</p> <p>(i) an <i>accessible</i> unisex <i>sanitary compartment</i> or an <i>accessible</i> unisex shower need not be provided on a <i>storey</i> or level that is not <i>required</i> by D3.3(f) to be provided with a passenger lift or ramp complying with AS 1428.1.</p>   |   |
| <p>F2.5 Construction of sanitary compartments</p>     | <p>(a) Other than in an <i>early childhood centre</i>, <i>sanitary compartments</i> must have doors and partitions that separate adjacent compartments and extend—</p> <p>(i) from floor level to the ceiling in the case of a unisex facility; or</p> <p>(ii) to a height of not less than 1.5 m above the floor if primary <i>school</i> children are the principal users; or (iii) 1.8 m above the floor in all other cases.</p> <p>(b) The door to a fully enclosed <i>sanitary compartment</i> must—</p> <p>(i) open outwards; or (ii) slide; or (iii) be readily removable from the outside of the <i>sanitary compartment</i>, unless there is a clear space of at least 1.2 m, measured in accordance with Figure F2.5, between the closet pan within the <i>sanitary compartment</i> and the doorway.</p> <p>(c) In an early childhood centre, facilities for use by children must have each sanitary compartment screened by a partition which, except for the doorway, is opaque for a height of at least 900 mm but not more than 1200 mm above the floor level.</p> | <p>- Compliance required with (a), (b) and (c) as applicable.</p> <p>This may require doors with lift off hinges to satisfy (b)(iii).</p> |
| <p>F2.6 Interpretation - Urinals &amp; washbasins</p> | <p>(a) A urinal may be—</p> <p>(i) an individual stall or wall-hung urinal; or</p> <p>(ii) each 600 mm length of a continuous urinal trough; or</p> <p>(iii) a closet pan used in place of a urinal.</p> <p>(b) A washbasin may be—</p> <p>(i) an individual basin; or</p> <p>(ii) a part of a hand washing trough served by a single water tap.</p>   | <p>Compliance required with (a) and (b) as applicable.</p>  |
| <p>F2.7, F2.8</p>                                     | <p>Microbial (legionella) control, Waste management</p>  | <p>Not applicable to the proposed development.</p>  |

| BCA Clause   | Description of Requirement  | Status/Action Required   |
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| <b>Part F3 - Room Sizes</b>                            |   |  |
| <p>F3.1<br/>Height of rooms and other spaces</p>       | <p>The ceiling height must be not less than —<br/>                     (a) in a Class 2 building —(i) a kitchen, laundry, or the like - 2.1 m; and (ii) a corridor, passageway or the like, 2.1m; &amp; (iii) a <i>habitable room</i> excluding a kitchen, 2.4m; &amp; (iv) in a room or space with a sloping ceiling or projections below the ceiling line within (A) &amp; (B)<br/>                     (b) in a Class 5, 6, 7 or 8 building - (i) except as allowed in (ii) and (f) — 2.4 m; and (ii) a corridor, passageway, or the like — 2.1 m; and<br/>                     (d) in a Class 9b building— (i) a <i>school</i> classroom or other <i>assembly building</i> or part that accommodates not more than 100 persons — 2.4 m; and<br/>                     (ii) a theatre, public hall or other <i>assembly building</i> or part that accommodates more than 100 persons — 2.7 m; and<br/>                     (iii) a corridor— (A) that serves an <i>assembly building</i> or part that accommodates not more than 100 persons — 2.4 m; or (B) that serves an <i>assembly building</i> or part that accommodates more than 100 persons — 2.7 m; and<br/>                     (iv) the number of persons accommodated must be calculated according to D1.13; &amp;<br/>                     (f) in any building— (i) a bathroom, shower room, <i>sanitary compartment</i>, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like - 2.1 m; and (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 like.</p> | <ul style="list-style-type: none"> <li>- Class 2 parts generally require 2.4m for habitable rooms and 2.1m for non habitable rooms in accordance with (a).</li> <li>- Class 7 parts generally require 2.4m or 2.1m in corridors in accordance with (b).</li> <li>- Class 9b buildings that accommodate not more than 100 persons requires min 2.4m clear height.</li> <li>- Ceiling heights within any building including carpark must comply with (f) (i) and (iii). It is required that AS2890.1 and 6 also be satisfied including parking spaces for persons with a disability which requires min.2.5m clear head height.</li> <li>- Compliance appears to be achieved as applicable, final details to be submitted with the Construction certificate.</li> </ul> |
| <b>Part F4 – Light and ventilation</b>                 |   |  |
| <p>F4.1 Natural light</p>                              | <p>Natural lighting must be provided in: (a) Class 2 buildings — to all <i>habitable rooms</i>.<br/>                     (d) Class 9b buildings -to all general purpose classrooms in primary or secondary <i>schools</i> and all playrooms or the like for the use of children in an <i>early childhood centre</i>.</p>  | <p>To be noted and complied with as applicable.</p>  |
| <p>F4.2 Methods and extent of natural lighting</p>     | <p>(a) Required natural lighting must be provided by (i) and (ii)<br/>                     (b) Except in a Class 9c aged care building, in a Class 2, 3, or 9 building or Class 4 part of a building a required window that faces a boundary of an adjoining allotment or a wall of the same building or another building on the allotment must be not less than the horizontal distance from that boundary or wall is the greater of (i) and (ii) and (iii)</p>  | <p>- Compliance required and appears to be complied with throughout as applicable to all habitable rooms as specified in F4.1.</p>   |
| <p>F4.3 Natural light borrowed from adjoining room</p> | <p>(a) Natural lighting to a room in a Class 2 building or in a <i>sole-occupancy unit</i> of a Class 3 building, may come through a glazed panel or opening from an adjoining room (including an enclosed verandah) if.....(i) and (ii) and (iii).....</p>   | <p>Compliance appears to be achieved throughout.<br/>                     If natural light is to be borrowed from an adjoining room, compliance with (a) and (b) will be required as appropriate.</p>  |
| <p>F4.4</p>  | <p>Artificial lighting</p>  | <p>The artificial lighting where provided within a building as identified in (a), (b) &amp; (c) must comply with AS/NZS 1680.0.</p>  |



| BCA Clause  | Description of Requirement   | Status/Action Required   |
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| F4.5<br>Ventilation of rooms                              | A <i>habitable room</i> , office, shop, factory, workroom, <i>sanitary compartment</i> , bathroom, shower room, laundry and any other room occupied by a person for any purpose must have (a) natural ventilation complying with F4.6; <u>or</u> (b) a mechanical ventilation or air-conditioning system complying with AS 1668.2.   | - Compliance required as applicable and appears to be provided to all habitable rooms in accordance with F4.6.   |
| F4.6<br>Natural Ventilation                               | (a) Natural ventilation provided in accordance with F4.5(a) must consist of permanent openings, windows, doors or other devices which can be opened—<br>(i) with a ventilating area not less than 5% of the <i>floor area</i> of the room <i>required</i> to be ventilated; and<br>(ii) open to—(A) a suitably sized court, or space open to the sky; or (B) an open verandah, carport, or the like; or (C) an adjoining room in accordance with F4.7.   | - Compliance required as applicable and appears to be provided to all habitable rooms in accordance (a).<br>- Note: Compliance with D1.7(c) must not compromise the provision of natural ventilation as required by this part.       |
| F4.7 Ventilation of rooms                                 | Natural ventilation to a room may come through a <i>window</i> , opening, ventilating door or other device from an adjoining room if both rooms are within the same <i>sole-occupancy unit</i> or the enclosed verandah is common property, and—<br>(a) in a Class 2 building, (i) the room to be ventilated is not a <i>sanitary compartment</i> ; and (ii) the <i>window</i> , opening, door or other device has a ventilating area of not less than 5% of the <i>floor area</i> of the room to be ventilated; and (iii) the adjoining room has a <i>window</i> , opening, door or other device with a ventilating area of not less than 5% of the combined <i>floor areas</i> of both rooms;<br>(b) in a Class 5, 6, 7, 8 (except a Class 8 electricity network substation) or 9 building—<br>(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<br>(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<br>(c) the ventilating areas specified in (a) and (b) may be reduced as appropriate if direct natural ventilation is provided from another source. | - Natural ventilation is required throughout and appears to be provided in accordance with (a) as applicable.<br>- Note: Compliance with D1.7 (c) must not compromise the provision of natural ventilation as required by this part. |
| F4.8 Restriction on position of water closets and urinals | A room containing a closet pan or urinal must not open directly into—<br>(a) a kitchen or pantry; (b) a public dining room or restaurant; or<br>(e) a workplace normally occupied by more than one person.   | To be noted and complied with as applicable.   |
| F4.9 Airlocks   | If a room containing a closet pan or urinal is prohibited under F4.8 from opening directly to another room— (a) in a <i>sole-occupancy unit</i> in a Class 2 or Class 3 part of a building—<br>(i) access must be by an airlock, hallway or other room; or (ii) the room containing the closet pan or urinal must be provided with mechanical exhaust ventilation;<br>(b) in a Class 5-9 building (i) or (ii).....   | Noted, compliance with (a) & (b) is required as applicable.<br>Details to be submitted with CC   |

| BCA Clause   | Description of Requirement   | Status/Action Required   |
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| F4.11 Car parks  | (a) Every storey of a carpark, except for an open deck carpark, must have— (i) a system of mechanical ventilation complying with AS 1668.2; or (b) a system of natural ventilation complying with Section 4 of AS1668.4.   | - To be complied with as applicable.- Mechanical supply and exhaust ventilation including the location of the exhaust outlet is required in accordance with AS1668.2. Details to be submitted with the Construction Certificate. |
| F4.12 Kitchen local exhaust ventilation                            | A commercial kitchen must be provided with a kitchen exhaust hood complying with AS/NZS 1668.1 and AS 1668.2 where—(a) any cooking apparatus has—<br>(i) a total maximum electrical power input exceeding 8 kW; or<br>(ii) a total gas power input exceeding 29 MJ/h; or<br>(b) the total maximum power input to more than one apparatus exceeds— (i) 0.5 kW electrical power; or (ii) 1.8 MJ gas, per m2 of <i>floor area</i> of the room or enclosure                            | Compliance required with (a) and (b) as applicable if a commercial kitchen is to be provided in the child care centre.   |
| <b>Part F5 – Sound transmission and insulation</b>                 |  |  |
| F5.2   | Determination of airborne sound insulation ratings (a) or (b)  | Clause (a) and (b) require compliance as applicable  |
| F5.3   | Determination of impact sound insulation ratings including (a), (b) and (c).....as applicable  | Clause (a), (b) and (c) to be complied with as applicable. Discontinuous construction required in the class 2 part.  |
| F5.4   | Sound insulation rating of floors (a) , (b)  | Clause (a) to be complied with as applicable.  |
| F5.5   | Sound insulation rating of walls (a) to (f) inclusive as applicable.   | Sound insulation in walls to comply with (a), (b), ( e) and (f)  |
| F5.6. Sound insulation rating                                      | Sound insulation rating of services (a) and (b) as applicable.   | Sound insulation of services must comply with Clause (a) and (b) to be satisfied as applicable.  |
| F5.7. Sound isolation of pumps                                     | A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.   | To be complied with as applicable. Details to be submitted with CC   |
| <b>SPECIFICATION F5.2 – Sound Insulation for Building Elements</b> |  |  |
| 1. Scope   | (a) This Specification lists the weighted sound reduction index $R_w$ for some common forms of construction.<br>(b) Wall systems listed in Table 2 having a minimum 20 mm cavity between 2 separate leaves, with :<br>(i) for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and<br>(ii) for other than masonry, there is no mechanical linkage between leaves except at the periphery, are deemed to be discontinuous construction. | The requirements of this part(a) and (b) including clause 2 are to be complied with as applicable.<br><br>Details to be submitted with CC  |

| BCA Clause   | Description of Requirement  | Status/Action Required  |
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| <b>SPECIFICATION F5.5 – Impact Sound – Test of Equivalence</b> |   |   |
| 1. Scope   | This Specification describes a method of test to determine the comparative resistance of walls to the transmission of impact sound.   | To be complied with as applicable.<br>Details to be submitted with CC   |
| <b>SECTION G – Ancillary Provisions</b>                        |   |   |
| <b>PART G1 Minor Structures and Components</b>                 |   |   |
| G1.01 Provision for cleaning windows                           | (a) A building must provide for a safe manner of cleaning any <i>windows</i> located 3 or more <i>storeys</i> above ground level.<br>(b) A building satisfies (a) where –<br>(i) the <i>windows</i> can be cleaned wholly from within the building; or<br>(ii) provision is made for the cleaning of the <i>windows</i> by a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.   | - Compliance required as applicable.<br>- Details on the proposed method of complying with (a) and (b) is to be submitted with the Construction Certificate.                      |
| <b>SECTION J – Energy efficiency</b>                           |   |   |
| <b>Part J0 Energy Efficiency</b>                               |   |   |
| J0.1. Application of Section J                                 | <i>Performance Requirements</i> JP1, JP2 and JP3 are satisfied by complying with—<br>(a) for reducing the heating or cooling loads—<br>(i) of SOU's of a Class 2 building, J0.2 and J0.3; and<br>(ii) of a Class 2 to 9 building, other than the SOU's of a Class 2 building, Parts J1, J2 and J3; and<br>(b) for <i>air-conditioning</i> and ventilation, Part J5; and<br>(c) for artificial lighting and power, Part J6; and<br>(d) for hot water supply and <i>swimming pool</i> and spa pool plant, Part J7; and<br>(e) for facilities for maintenance and monitoring, Part J8. | - Not part of this report, however compliance with Part J1 to Part J8 is required as applicable.<br>- An independent report is to be submitted with the Construction certificate. |

## 5.0 CONCLUSION

This report highlights the items that need to be implemented to fully comply with the Deemed-to-Satisfy provisions of BCA 2016 –Volume One as applicable.

Compliance with BCA 2016, as adopted on 1<sup>st</sup> May 2016 will also generally be satisfied, however minor adjustments may be required to satisfy the Disability (Access to Premises-Buildings ) Standards 2010 , AS 1428.1-2009 and AS2890.6

This will ensure that the provisions of Fire Safety and/or Fire Safety awareness is adequate to prevent the spread of fire or ensure or promote the safety of persons in the event of fire and to ensure that the maintenance or use of the premises does not constitute a significant fire hazard.

Where a technical non-compliance with the prescriptive requirements has been identified and full compliance cannot be achieved, an Alternative Solution prepared by an appropriately qualified person to demonstrate compliance with the performance requirements may be appropriate.

I confirm that following the review and assessment of the architectural plans and documentation provided it has been resolved that the proposed development is capable of complying with the Deemed-to-Satisfy and/or Performance Provisions of the Building Code of Australia and associated Australian Standards.

**ANNEXURE A**

**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 therein) or other external building element, where the distance from any <i>fire-source feature</i> to which it is exposed is— |   |             |             |             |
| For <i>loadbearing</i> parts—   |   |             |             |             |
| less than 1.5 m   | 90/ 90/ 90  | 120/120/120 | 180/180/180 | 240/240/240 |
| 1.5 to less than 3 m  | 90/ 60/ 60  | 120/ 90/ 90 | 180/180/120 | 240/240/180 |
| 3 m or more   | 90/ 60/ 30  | 120/ 60/ 30 | 180/120/ 90 | 240/180/ 90 |
| For non- <i>loadbearing</i> parts—  |   |             |             |             |
| less than 1.5 m   | -/ 90/ 90   | -/120/120   | -/180/180   | -/240/240   |
| 1.5 to less than 3 m  | -/ 60/ 60   | -/ 90/ 90   | -/180/120   | -/240/180   |
| 3 m or more   | -/ -/ -   | -/ -/ -     | -/ -/ -     | -/ -/ -     |
| <b>EXTERNAL COLUMN</b> not incorporated in an <i>external wall</i> —  |   |             |             |             |
| For <i>loadbearing</i> columns—   |   |             |             |             |
|   | 90/-/ -   | 120/-/ -    | 180/-/ -    | 240/-/ -    |
| For non- <i>loadbearing</i> columns—  |   |             |             |             |
|   | -/ -/ -   | -/ -/ -     | -/ -/ -     | -/ -/ -     |
| <b>COMMON WALLS and FIRE WALLS—</b>   | 90/ 90/ 90  | 120/120/120 | 180/180/180 | 240/240/240 |
| <b>INTERNAL WALLS—</b>  |   |             |             |             |
| <i>Fire-resisting</i> lift and stair <i>shafts</i> —  |   |             |             |             |
| <i>Loadbearing</i>  | 90/ 90/ 90  | 120/120/120 | 180/120/120 | 240/120/120 |
| Non- <i>loadbearing</i>   | -/ 90/ 90   | -/120/120   | -/120/120   | -/120/120   |
| Bounding <i>public corridors</i> , public lobbies and the like—   |   |             |             |             |
| <i>Loadbearing</i>  | 90/ 90/ 90  | 120/-/ -    | 180/-/ -    | 240/-/ -    |
| Non- <i>loadbearing</i>   | -/ 60/ 60   | -/ -/ -     | -/ -/ -     | -/ -/ -     |
| Between or bounding <i>sole-occupancy units</i> —   |   |             |             |             |
| <i>Loadbearing</i>  | 90/ 90/ 90  | 120/-/ -    | 180/-/ -    | 240/-/ -    |
| Non- <i>loadbearing</i>   | -/ 60/ 60   | -/ -/ -     | -/ -/ -     | -/ -/ -     |
| Ventilating, pipe, garbage, and like <i>shafts</i> not used for the discharge of hot products of combustion—  |   |             |             |             |
| <i>Loadbearing</i>  | 90/ 90/ 90  | 120/ 90/ 90 | 180/120/120 | 240/120/120 |
| Non- <i>loadbearing</i>   | -/ 90/ 90   | -/ 90/ 90   | -/120/120   | -/120/120   |
| <b>OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES and COLUMNS—</b>   |   |             |             |             |
|   | 90/-/ -   | 120/-/ -    | 180/-/ -    | 240/-/ -    |
| <b>FLOORS</b>   | 90/ 90/ 90  | 120/120/120 | 180/180/180 | 240/240/240 |
| <b>ROOFS</b>  | 90/ 60/ 30  | 120/ 60/ 30 | 180/ 60/ 30 | 240/ 90/ 60 |

**Table 3.9 REQUIREMENTS FOR CARPARKS**

| Building element   |   | FRL (not less than) <i>Structural adequacy/Integrity/Insulation</i> |
|--|---|---|
|  |   | ESA/M (not greater than)  |
| <b>Wall</b>  |   |   |
| (a)  | <a href="#">external wall</a>   |   |
|  | (i) less than 3 m from a <a href="#">fire-source feature</a> to which it is exposed:  |   |
|  | <a href="#">Loadbearing</a>   | 60/60/60  |
|  | Non- <a href="#">loadbearing</a>  | -/60/60   |
|  | (ii) 3 m or more from a <a href="#">fire-source feature</a> to which it is exposed  | -/-/-   |
| (b)  | <a href="#">internal wall</a>   |   |
|  | (i) <a href="#">loadbearing</a> , other than one supporting only the roof (not used for carparking)   | 60/-/-  |
|  | (ii) supporting only the roof (not used for carparking)   | -/-/-   |
|  | (iii) non- <a href="#">loadbearing</a>  | -/-/-   |
| (c)  | <a href="#">fire wall</a>   |   |
|  | (i) from the direction used as a <a href="#">carpark</a>  | 60/60/60  |
|  | (ii) from the direction not used as a <a href="#">carpark</a>   | as <a href="#">required by Table 3</a>                              |
| <b>Column</b>  |   |   |
| (a)  | supporting only the roof (not used for carparking) and 3 m or more from a <a href="#">fire-source feature</a> 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 <a href="#">carpark</a>  | 60/-/- or 26 m <sup>2</sup> /tonne                                  |
| (c)  | any other column not covered by (a) or (b)  | 60/-/-  |
| <b>Beam</b>  |   |   |
| (a)  | steel floor beam in continuous contact with a concrete floor slab   | 60/-/- or 30 m <sup>2</sup> /tonne                                  |
| (b)  | any other beam  | 60/-/-  |
| <b>Fire-resisting lift and stair shaft (within the <a href="#">carpark</a> only)</b> |   | 60/60/60  |
| <b>Floor slab and vehicle ramp</b>   |   | 60/60/60  |
| <b>Roof (not used for carparking)</b>  |   | -/-/-   |
| <b>Notes:</b>  |   |   |
| 1.   | ESA/M means the ratio of exposed surface area to mass per unit length.  |   |
| 2.   | Refer to <a href="#">Specification E1.5</a> for special requirements for a sprinkler system in a <a href="#">carpark</a> complying with Table 3.9 and located within a multi-classified building. |   |