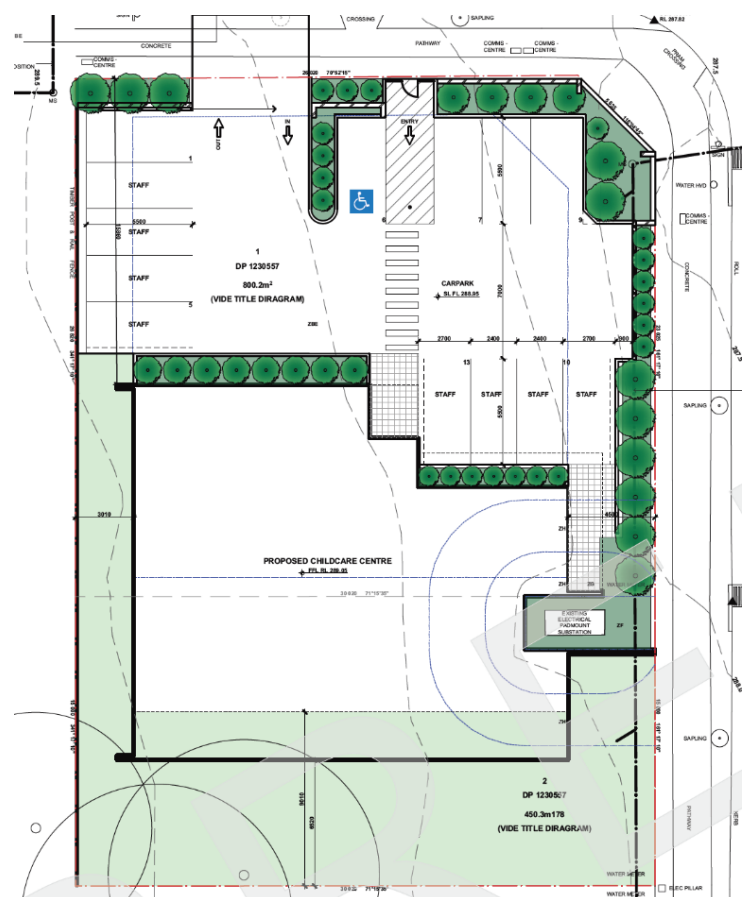


BUILDING CODE OF AUSTRALIA COMPLIANCE ASSESSMENT REPORT

ACCESS ASSESSMENT REPORT

CHILDCARE CENTRE

Lots 1 & 2, DP1230557, No. 2-6 Chalker Street, THIRLMERE



DATE ► 30.06.2019

REPORT NO. ► PROJECT #9212 - REV #01

PREPARED FOR ► Oakdale Building & Management Services

PREPARED BY ► AE&D

1.0 Contents

1.0	CONTENTS	2
2.0	EXECUTIVE SUMMARY AND RECOMMENDATIONS	3
2.1	RECOMMENDATIONS	3
3.0	INTRODUCTION	7
3.1	BASIS OF REPORT	7
3.2	PURPOSE OF THE REPORT	7
3.3	LIMITATIONS OF THE REPORT	7
4.0	BCA ASSESSMENT DATA	8
4.1	LOCATION OF FIRE SOURCE FEATURES	8
4.2	SUMMARY OF FIRE SERVICES REQUIRED	9
5.0	BCA ASSESSMENT SUMMARY	10
6.0	PART D3 - ACCESS FOR PEOPLE WITH DISABILITIES	29
7.0	CONCLUSION	61
8.0	ATTACHMENT A - INSPECTION & MAINTENANCE	62
8.1	FIRE SAFETY MEASURES	62
8.2	GOOD HOUSEKEEPING	62
9.0	ATTACHMENT B – FIRE-RESISTING CONSTRUCTION	63
10.0	ATTACHMENT B – REQUIREMENTS TYPE C CONSTRUCTION	66

REVISION STATUS				
REVISION	DATE	STATUS	WRITTEN	CHECKED
9212 - Rev 00	19 June 2019	DRAFT FOR COMMENT	FC	TJ
9212 - Rev 01	30 June 2019	FINAL	FC	TJ

COMMERCIAL IN CONFIDENCE

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

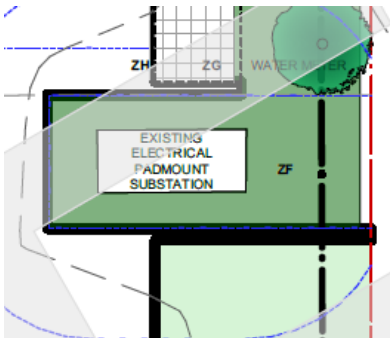
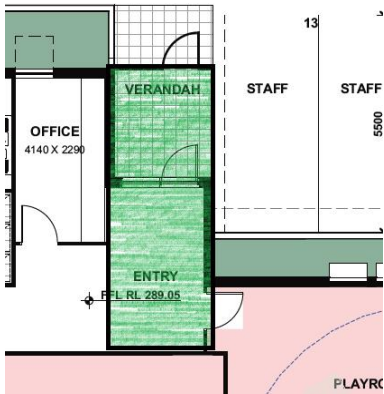
2.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS

This report provides a Building Code of Australia (BCA) 2019 assessment of Childcare Centre, to be located at Lots 1 & 2, DP1230557, No. 2-6 Chalker Street, THIRLMERE.

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

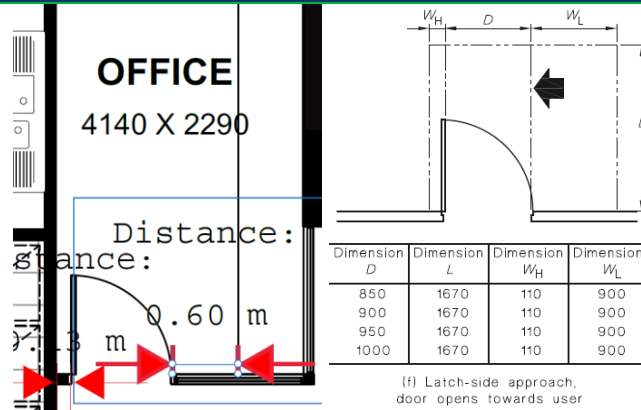
2.1 Recommendations

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

BCA Clause	Deemed-to-Satisfy Provision to be addressed
C2.13 Electricity supply system	<p>An electricity substation located within a building must—</p> <ul style="list-style-type: none"> (i) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and (ii) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30. 
D1.2 Number of exits required	<p>The Building is required to be provided with two (2) exits.</p> 
D3.1 General Building Access Requirements	<p>Office Door is to be provided with a 900mm latch side clearance (the fixed joinery encroaching)</p>

BCA Clause

Deemed-to-Satisfy Provision to be addressed



D3.2 Access to buildings

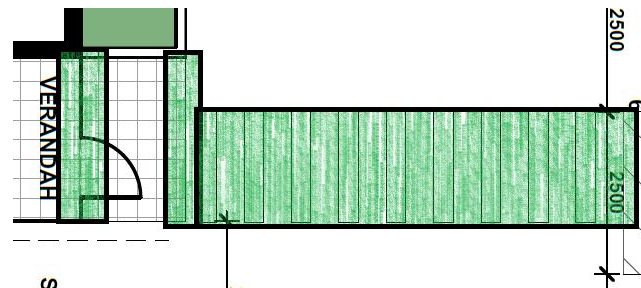
An accessway must be provided to a building required to be accessible from the main points of a pedestrian entry at the allotment boundary.

6.3 Width of a continuous accessible path of travel

Unless otherwise specified (such as at doors, curved ramps and similar), the minimum unobstructed width (see Figure 2) of a continuous accessible path of travel shall be 1000 mm and the following shall not intrude into the minimum unobstructed width of a continuous accessible path of travel:

- Fixtures and fittings such as lights, awnings, windows that, when open, intrude into the circulation space, telephones, skirtings and similar objects.
- Essential fixtures and fittings such as fire hose reels, fire extinguishers and switchboards.
- Door handles less than 900 mm above the finished floor level.

Access way to the building details different floor surfaces. The abutment of surfaces shall have a smooth transition. In the event the difference in level is more than 0 ±3 mm a threshold ramp is required to be provided in accordance with Clause 10.5 of AS1428.1 – 2009



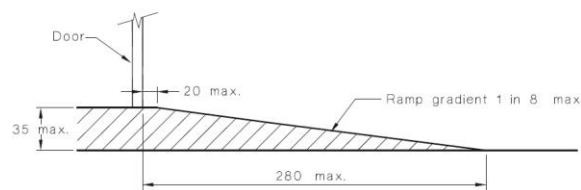
10.5 Threshold ramps


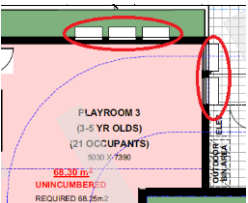
Threshold ramps at doorways on a continuous path of travel shall have—

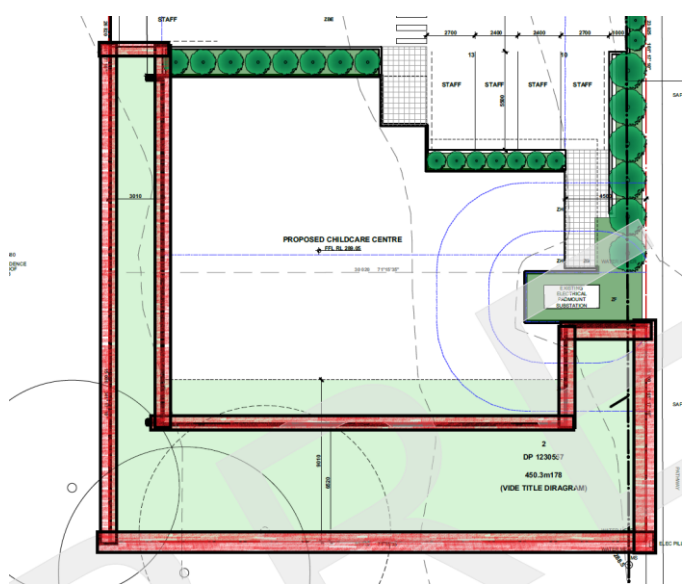
- a maximum rise of 35 mm;
 - a maximum length of 280 mm;
 - a maximum gradient of 1:8; and
 - be located within 20 mm of the door leaf which it serves,
- as shown in Figure 21.

The edges of the threshold ramp shall be tapered or splayed at a minimum of 45° where the ramp does not abut a wall.

NOTE: For door controls, see Clause 13.5.



BCA Clause	Deemed-to-Satisfy Provision to be addressed
<p>F2.3</p> <p>Facilities in Class 3 to 9 buildings</p>	<ul style="list-style-type: none"> <i>The Kitchen location does not permit the ability to facilitate supervision of children from Playroom 1.</i>  <ul style="list-style-type: none"> <i>The childcare centre is to be provided with one bath or shower.</i> <i>For children younger than 3 years old</i> <ul style="list-style-type: none"> <i>The Laundry is to be provided with a washtub</i> <i>A bench type baby bath, which is within 1m of a nappy change bench</i> <i>a nappy changing bench which—</i> <ul style="list-style-type: none"> <i>is within 1 m of separate adult hand washing facilities and bench type baby bath; and</i> <i>must be not less than 0.9 m2 in area and at a height of not less than 850 mm, but not more than 900 mm above the finished floor level; and</i> <i>must have a space not less than 800 mm high, 500 mm wide and 800 mm deep for the storage of steps; and</i> <i>is positioned to permit a staff member changing a nappy to have visibility of the play area at all times.</i> <i>4x children junior pans are required and 4x washbasins with a rim height not exceeding 600mm are required to be provided that have access from both indoor and outdoor play areas.</i>
<p>F2.5</p> <p>Construction of sanitary compartments</p>	<p>The 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>F4.2</p> <p>Methods and extent of natural light</p>	<p>The sills of 50% of windows in children's rooms must be located not more than 500 mm above the floor level. One window in Playroom 3 is to have a sill height not more than 500mm from the floor level.</p> 

BCA Clause	Deemed-to-Satisfy Provision to be addressed
<p>G1.3</p> <p>Outdoor play areas</p>	<p>The outdoor play space must be enclosed on all sides with a barrier which complies with AS 1926.1-2012.</p> 

3.0 INTRODUCTION

This report provides a Building Code of Australia (BCA) 2019 assessment of Childcare Centre, to be located at Lots 1 & 2, DP1230557, No. 2-6 Chalker Street, THIRLMERE.

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

3.1 Basis of Report

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

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

- Architectural plans prepared by Algorry Zappia & Associates – Project #P5399, Drawing Numbers:

Drawing Number	Revision	Dated	Drawing Title
A02	-	17 June 2019	SITE, ANALYSIS PLAN
A03	-	17 June 2019	NEIGHBOURHOOD CONTECT PLAN
A04	-	17 June 2019	GROUND FLOOR PLAN
A05	-	17 June 2019	SECTION MATERIALS & COLOURS SCHEDULE
A06	-	17 June 2019	ELEVATIONS

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

3.2 Purpose of the Report

The purpose of this report is to assess the following:

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

3.3 Limitations of the Report

This report does not assess the following:

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

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

4.0 BCA ASSESSMENT DATA

The following data is provided in respect to review of the building under the Building Code of Australia 2016 in respect to the compliance assessment of the Childcare Centre, to be located at Lots 1 & 2, DP1230557, No. 2-6 Chalker Street, THIRLMERE.

BCA Building Classifications: 9b

Building rise in storeys: #1 (determined in accordance with C1.2 of the BCA).

Type of Construction: C (determined in accordance with C1.1 of the BCA)

Table C2.2 Maximum size of fire compartments or atria

General Floor area limitations:

Classification	Type A construction	Type B construction	Type C construction
5, 9b or 9c	Max <i>floor area</i> —8 000 m ² Max volume—48 000 m ³	Max <i>floor area</i> —5 500 m ² Max volume—33 000 m ³	Max <i>floor area</i> —3 000 m ² max volume—18 000 m ³
6, 7, 8 or 9a (except for <i>patient care areas</i>)	Max <i>floor area</i> —5 000 m ² Max volume—30 000 m ³	Max <i>floor area</i> —3 500 m ² Max volume—21 000 m ³	Max <i>floor area</i> —2 000 m ² Max volume—12 000 m ³

Effective Height (m): 0m

Climate Zone (Thermal Design) 6 (determined in accordance with Climate Zone Map: New South Wales and Australian Capital Territory)

4.1 Location of Fire Source features

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

In this instance the following setbacks are determined in respect to the fire source features applicable to the building on the assumption that premise will be consolidated to a single allotment under Development Application - South & Western side and rear boundary. Northern and Eastern boundaries adjoin primary and secondary streets.



4.2 Summary of Fire Services Required

Summarised below are also the likely fire services required for the building:

- Automatic shutdown air handling systems to be provided to serve the building in accordance with NCC 2019, Clause E2.3 NSW Table E2.2b
- Automatic fire detection and alarm system to be provided to serve the building in accordance with NCC 2019, Clause E2.2, AS 1670.1-2018.
- An emergency lighting system must be installed throughout the basement carpark in accordance with BCA E4.2 of the BCA and AS 2293.1-2018
- Exit signs must be installed throughout the basement carpark in accordance with BCA E4.5 and AS 2293.1-2018
- Mechanical air handling systems where required are to serve the building in accordance with NCC 2019, Clause E2.2, F4.12, AS/NZS 1668.1-2015, AS 1668.2-2012
- Portable fire extinguishers where required are to serve the building in accordance with NCC 2019, Clause E1.6, AS 2444-2001
- Warning and operational signs where required are to serve the building in accordance with NCC 2019, Clause D3.6

5.0 BCA ASSESSMENT SUMMARY

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

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
SPECIFICATION A1.1					
FIRE PROTECTED TIMBER					
Specification A1.1 has been introduced to allow fire-protective timber construction utilising a non-combustible fire protective covering for buildings not exceeding 25m which are sprinkler protected.					
2.1 General requirements			X		Requirements for fire protected timber
2.2 Massive Timber			X		Requirements for fire protected timber, where the timber is massive timber being an element not less than 75mm thick in each direction formed from chemically bonded laminated timber and includes- <ul style="list-style-type: none"> • Cross Laminated timber (CLT) • Laminated veneer lumber (LVL) • Glue laminate timber (Glulam)
SECTION B					
STRUCTURE					
Part B1: Structural Provisions				X	<ul style="list-style-type: none"> • Structural engineer to provide structural drawings/details and accompanying structural design certificate to demonstrate that all building elements will comply with Section B of the BCA. • Glazing must comply with AS1288-2006 and AS2047-2014. • Termite control must comply with AS3660.1-2000 where any primary building elements are timber. • If the building is in a flood hazard area it is required to comply with BCA clause B1.6. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification (and structural details)</i></p>
SECTION C					
FIRE RESISTANCE					
Part C1					
Fire Resistance & Stability					
C1.1 Type of Construction Required				X	<p>Refer to Spec C1.1 and Attachment B for Schedule of FRLs for Type C Construction. These are to be certified by the architect and structural engineer as having been met, based on the proposed design.</p> <p>Please note that specification C1.1 also requires design compliance with the following:</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>The method of attaching or installing a finish, lining, ancillary element or service installation to the building element must not reduce the fire-resistance of that element to below that required.</p> <p>An external wall that is required by Table 5 to have an FRL need only be tested from the outside to satisfy the requirement;</p> <p>A part of a building element is not exposed to a fire-source feature if the fire-source feature is—</p> <ul style="list-style-type: none"> (i) an external wall of another building that stands on the allotment and the part concerned is more than 15 m above the highest part of that external wall; or (ii) a side or rear boundary of the allotment and the part concerned is below the level of the finished ground at every relevant part of the boundary concerned. <p>A part of a building element is exposed to a fire-source feature if any of the horizontal straight lines between that part and the fire-source feature, or vertical projection of the feature, is not obstructed by another part of the building that—</p> <ul style="list-style-type: none"> (i) has an FRL of not less than 30/—/—; and (ii) is neither transparent nor translucent. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification (and structural details)</i></p>
C1.2 Calculation of Rise In Stories			X		Refer to Section 2.0 of this report for further details
C1.3 Buildings of Multiple Classifications			X		<p>Informational:</p> <p>In a building of multiple classifications, the type of construction required for the building is the most fire resisting Type resulting from the application of Table C1.1 on the basis that the classification applying to the top storey applies to all storeys.</p> <p>Separate requirements apply to a Class 4 building.</p>
C1.4 Mixed Types of Construction			X		<p>Informational:</p> <p>A building may be of mixed Types of construction where it is separated in accordance with C2.7 and the type of construction is determined in accordance with C1.1 or C1.3.</p>
C1.5 Two Storey Class 2, 3 or 9 buildings			X		Not Applicable
C1.6			X		Not Applicable

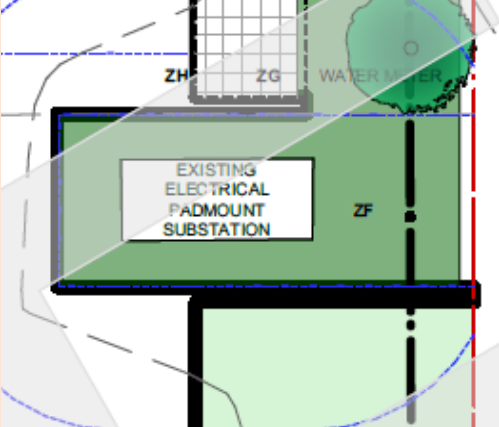
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Class 4 Parts					
C1.7 Open Spectator Stands			X		Not Applicable
C1.8 Lightweight Construction			X		<p>Where it is proposed to use <i>lightweight construction</i> (within the meaning of the BCA) this must comply with Specification C1.8 if it is used in a wall system—</p> <p>(i) that is required to have an FRL; or</p> <p>(ii) for a lift shaft, stair shaft or service shaft or an external wall bounding a public corridor including a non-fire-isolated passageway or non-fire-isolated ramp.</p> <p>If lightweight construction is used for the fire-resisting covering of a steel column or the like, and if —</p> <p>(i) the covering is not in continuous contact with the column, then the void must be filled solid, to a height of not less than 1.2 m above the floor to prevent indenting; and</p> <p>(ii) the column is liable to be damaged from the movement of vehicles, materials or equipment, then the covering must be protected by steel or other suitable material.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
C1.9 Non - combustible building elements				X	A loadbearing internal wall including those that are part of a loadbearing shaft, must comply with Specification C1.1.
C1.10 Fire Hazard Properties				X	<p>(a) The fire hazard properties of the following internal linings, materials and assemblies must comply with Specification C1.10 by way of test reports / certificates provided from a <i>registered testing authority</i> (within the meaning of the BCA):</p> <p>(i) Floor linings and floor coverings.</p> <p>(ii) Wall linings and ceiling linings.</p> <p>(iii) Air-handling ductwork.</p> <p>(vi) Escalators, moving walkways and non-required non-fire isolated stairways or pedestrian ramps subject to Specification D1.12.</p> <p>(vii) Sarking type materials.</p> <p>(viii) Attachments to floors, ceilings, internal walls and the internal linings of external walls.</p> <p>(ix) Other materials including insulation materials other than sarking type materials.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(b) NSW: Paint or fire -retardant coatings must not be used in order to make a material comply with the required fire hazard property, except in respect to a material referred to in NSW Specifications C1.10, NSW Table 4 and to which Notes 4 and 5 are applicable.</p> <p>(c) The requirement s of (a) do not apply to a material or assembly if it is –</p> <ul style="list-style-type: none"> (i) plaster, cement render, concrete, terrazzo, ceramic tile or the like; or (ii) a fire protective covering; or (iii) a timber framed window; or (iv) a solid timber handrail or skirting; or (v) a timber-faced door; or (vi) an electrical switch, socket-outlet, cover plate or the like; or (vii) a material used – <ul style="list-style-type: none"> (A) a roof insulating material applied in continuous contact with a substrate; or (B) an adhesive; or (C) a damp-proof course, flashing, caulking, sealing, ground moisture barrier or the like; or (viii) a paint, varnish, lacquer or similar finish, other than nitro-cellulose lacquer; or (ix) a clear or translucent roof light of glass fibre-reinforced polyester if – <ul style="list-style-type: none"> A. the roof in which is is installed forms part of a single storey building required to be Type C construction; and B. the material is used as part of the roof covering; and C. it is no closer than 1.5m from another roof light of the same type; and D. each roof light is not more than 14m² in area; and E. the area of the roof lights per 70m² of roof surface is not more than 14m² in area; or (x) a face plate or neck adaptor of supply and return air outlets of an air handling system; or (xi) a face plate or diffuser plate of light fitting and emergency exit signs and associated electrical wiring and electrical components; or (xii) a joinery unit, cupboard, shelving or the like; or (xiii) NSW: an attached non-building fixture and fitting such as – <ul style="list-style-type: none"> (A) A curtain, blind, or similar décor, other than- (aa) a proscenium curtain required by Specification H1.3; or

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(bb) in a Class 9b building used as an entertainment venue, a material that is regulated under NSW Table 4; and</p> <p>(B) A whiteboard, window treatment or the like; or</p> <p>(i) Timber treads, risers, landings and associated supporting framework installed in accordance with D2.25 where the Spread-of-Flame Index and the Smoke-Developed Index of the timber does not exceed 9 and respectively; or</p> <p>(ii) Any other material that does not significantly increase the hazards of the fire.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
C1.11 Performance of External Walls in Fire			X		Concrete external walls that could collapse as complete panels (e.g. tilt-up and pre-cast concrete), in a building having a rise in storeys of not more than 2, must comply with Specification C1.11.
C1.12 Combustible materials			X		Deleted.
C1.13 Fire protected timber: concession			X		Not Applicable
C1.14 Ancillary elements				X	<p>An <i>ancillary element</i> must not be fixed, installed or attached to the internal parts or external face of an <i>external wall</i> that is <i>required</i> to be <i>non-combustible</i> unless it is one of the following:</p> <p>(a) An ancillary element that is non-combustible.</p> <p>(b) A gutter, downpipe or other plumbing fixture or fitting.</p> <p>(c) A flashing.</p> <p>(d) A grate or grill not more than 2m² in an area associated with a building service.</p> <p>(e) An electrical switch, socket outlet, cover plate or the like.</p> <p>(f) A light fitting.</p> <p>(g) A <i>required</i> sign.</p> <p>(h) A sign other than one provided under (a) or (g) that –</p> <ol style="list-style-type: none"> (1) Achieves a group number 1 or 2; and (2) Does not extend beyond one storey; and (3) Does not extend beyond one fire compartment; and (4) Is separated vertically from other signs permitted under (h) by at least 2 storeys.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that –</p> <p>(1) Meets the requirements of Table 4 of Specification C1.10 as an internal element; and</p> <p>(2) Serves a storey -</p> <p>(A) At ground level; or</p> <p>(B) Immediately above a storey at ground level; and</p> <p>(3) Does not serve an exit, where it would render the exit unusable in a fire.</p> <p>(j) A part of a security, intercom or announcement system.</p> <p>(k) Wiring.</p> <p>(l) A paint, lacquer or similar finish,</p> <p>(m) A gasket, caulking, sealant or adhesive directly associated with (a) to (k).</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
Part C2					
Compartmentation & Separation					
C2.1 Application of Part			X		C2.2, C2.3 and C2.4 do not apply to a carpark provided with a sprinkler system (other than a FPAA101D or FPAA101H system complying with Specification E1.5, an open-deck carpark or an open spectator stand.
C2.2 General Floor Area & Volume Limitations	X				The size of any fire compartment or atrium in a Class 5, 6, 7, 8 or 9 building must not exceed the relevant maximum floor area and maximum volume set out in Table C2.2 & C2.5, except as permitted in C2.3.
C2.3 Large Isolated Buildings			X		Not Applicable
C2.4 Requirements for Open Space			X		Not Applicable
C2.5 Class 9a & 9c Buildings			X		Not Applicable
C2.6			X		Not Applicable

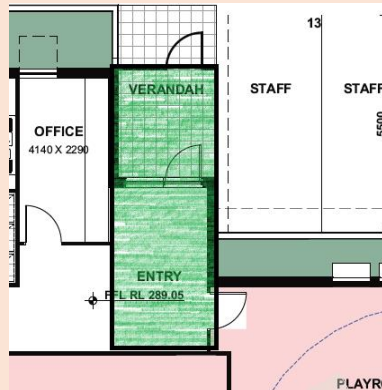
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Vertical Separation of openings in external walls					
C2.7 Separation by Fire Walls			X		Not Applicable
C2.8 Separation of Classifications in the same storey			X		Not Applicable
C2.9 Separation of Classifications in different storeys			X		Not Applicable
C2.10 Separation of lifts shafts			X		Not Applicable
C2.11 Stairways and lifts in one shaft			X		Not Applicable
C2.12 Separation of Equipment				X	<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 –</p> <ul style="list-style-type: none"> (i) Boilers; or (ii) A battery system installed in that building that has a total voltage of 12 volts or more and a storage capacity of 200kWh or more. <p>(b) Equipment need not be separated in accordance with (a) if the equipment comprises-</p> <ul style="list-style-type: none"> (i) Equipment otherwise adequately separated from the remainder of the building. <p>(c) Separating construction must have –</p> <ul style="list-style-type: none"> (i) Except as provided by (ii) – <ul style="list-style-type: none"> (A) An FRL is required by Specification C1.1, but not less than 120/120/120; and (B) Any doorway protected with a -/120/30 self-closing fire door; or (ii) When separating a lift shaft and lift motor room, an FRL not less than 120/-/-. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>
C2.13 Electrical Supply				X	An electricity substation located within a building must—

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(i) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and</p> <p>(ii) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30.</p>  <p>(b) A main switchboard located within the building (and which sustains emergency equipment operating in the emergency mode) must –</p> <p>(i) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and</p> <p>(ii) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30.</p> <p>(c) Electrical conductors located within the building that supply –</p> <p>(i) a main switchboard covered by (b), must—</p> <p>(ii) have a classification in accordance with AS/NZS 3013-2005 of not less than—</p> <p>(A) if located in a position that could be subject to damage by motor vehicles — WS53W; or</p> <p>(B) otherwise — WS52W; or</p> <p>(iii) be enclosed or otherwise protected by construction having an FRL of not less than 120/120/120</p> <p>(d) where emergency equipment is required in a building, all switchboards in the electrical installation, which sustain the electricity supply to the emergency equipment, must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear.</p> <p>(e) For the purposes of (d), emergency equipment includes but it is not limited to –</p> <p>(i) Air handling systems designed to exhaust and control the spread of fire and smoke.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(ii) Control and indicating equipment. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C2.14 Public corridors in Class 2 & 3 Buildings			X		Not Applicable
Part C3 Protection of Openings					
C3.1 Application of Part			X		<p>(a) The DTS provisions of this Part do not apply to-</p> <ul style="list-style-type: none"> (i) Control joints, weep holes and the like in external walls of masonry construction and joints between panels in external walls of pre-cast concrete panel construction if, in all cases they are not larger than necessary for the purpose; and (ii) Non-combustible ventilators for subfloor or cavity ventilation, if each does not exceed 45000m in face area and spaced not less than 2m from any other ventilator in the same wall; and (iii) Openings in the vertical plane formed between building elements at the construction edge or perimeter of a balcony or verandah, colonnade, terrace, or the like and (iv) In a carpark – <ul style="list-style-type: none"> (A) Service penetrations through; and (B) Openings formed by a vehicle ramp in, a floor other than a floor that separates a part not uses as a carpark, providing the connected floors comply as a single fire compartment for the purposes of all other requirements of the DTS provisions of Sections C, D & E. <p>(b) For the purposes of DTS provisions of this Part, openings in building elements required to be fire resisting include doorways, windows (including any associated fanlight), infill panels and fixed or openable glazed areas that do not have the required FRL.</p> <p>(c) For the purposes of the DTS provisions of this part, openings other than those covered under (a)(iii), between building elements such as columns, beams and the like, in the plane formed at the construction edge of the perimeter of the building, are deemed to openings in the external wall.</p>
C3.2			X		Not Applicable

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Protection of openings in external walls					
C3.3 Separation of external walls and associated openings in different fire compartments			X		Not Applicable
C3.4 Acceptable Methods of Protection			X		<p>(a) Where protection is required to doorways and windows and other openings they must be protected as follows:</p> <p>(i) Doorways</p> <ul style="list-style-type: none"> - Internal or external wall wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or - -/60/30 fire doors that are self-closing or automatic closing <p>(ii) Windows</p> <ul style="list-style-type: none"> - Internal or external wall wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position or; - -/60- fire windows that are automatic closing or permanently fixed in the closed position or - -/60- automatic closing fire shutters. <p>(iii) Other openings –</p> <ul style="list-style-type: none"> - Excluding voids – internal or external wall wetting sprinklers as appropriate or - Construction having a FRL not less than -/60/- <p>(b) Fire doors, fire windows and fire shutters must comply with Specification C3.4.</p>
C3.5 Doorways in Fire Walls			X		Not Applicable
C3.6 Sliding Fire Doors			X		Not Applicable
C3.7 Protection of Doorways in horizontal exits			X		Not Applicable
C3.8 Openings in fire isolated exits			X		Not Applicable
C3.9			X		Not Applicable

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Service Penetrations in fire-isolated exits					
C3.10 Openings in Fire isolated lift shafts			X		Not Applicable
C3.11 Bounding Construction			X		Not Applicable
C3.12 Openings in floors and ceilings for services				X	Where services pass through a floor which is required to achieve an FRL or a ceiling required to have a RISF, the service must be enclosed within a fire resisting shaft or fire protected in accordance with Clause C3.15. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C3.13 Openings in Shafts			X		Not Applicable
C3.15 Openings for Service Installations				X	Where services pass through an element which is required to achieve an FRL (other than an external wall or roof), the service must be fire stopped by a tested system or Specification C3.15. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C3.16 Construction Joints				X	Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner identical with a prototype tested in accordance with AS 1530.4 to achieve the required FRL. The requirements above do not apply where joints, spaces and the like between fire protected timber elements are provided with cavity barriers in accordance with Specification C1.13. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C3.17 Columns protected in lightweight construction to achieve an FRL			X		Any column protected by lightweight construction to achieve an FRL which passes through a building element that is required to have an FRL or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly of construction which has achieved the required FRL or resistance to the incipient spread of fire.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
SECTION D					
ACCESS & EGRESS					
Part D1					
Provision for Escape					
D1.1 Application of Part			X		The DTS provisions of this Part do not apply to the internal parts of a sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building.
D1.2 Number of Exits required		X			<p>The Building is required to be provided with two (2) exits.</p>  <p>(a) All buildings — Every building must have at least one exit from each storey.</p> <p>(d) Class 9 buildings — In addition to any horizontal exit, not less than 2 exits must be provided from the following:</p> <ul style="list-style-type: none"> (i) Each storey in a Class 9b building used as an early childhood centre. <p>(g) Access to exits — Without passing through another sole-occupancy unit every occupant of a storey or part of a storey must have access to—</p> <ul style="list-style-type: none"> (i) at least 2 exits, if 2 or more exits are required. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D1.3 When Fire Isolated exits are required			X		Not Applicable
D1.4 Exit Travel Distances	X				<p>(c) Class 5, 6, 7, 8 or 9 buildings — Subject to (d), (e) and (f)—</p> <ul style="list-style-type: none"> (i) no point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>2 exits is available, in which case the maximum distance to one of those exits must not exceed 40 m; and</p> <p>(ii) in a Class 5 or 6 building, the distance to a single exit serving a storey at the level of access to a road or open space may be increased to 30 m.</p> <p>(f) Assembly buildings — In a Class 9b building other than a school or early childhood centre, the distance to one of the exits may be 60 m if—</p> <p>(i) the path of travel from the room concerned to that exit is through another area which is a corridor, hallway, lobby, ramp or other circulation space; and</p> <p>(ii) the room is smoke-separated from the circulation space by construction having an FRL of not less than 60/60/60 with every doorway in that construction protected by a tight fitting, self-closing, solid-core door not less than 35 mm thick; and</p> <p>(iii) the maximum distance of travel does not exceed 40 m within the room and 20 m from the doorway to the room through the circulation space to the exit.</p>
<p>D1.5</p> <p>Distance Between Alternative Exits</p>				X	<p>Exits that are required as alternative means of egress must be—</p> <p>(a) distributed as uniformly as practicable within or around the storey served and in positions where unobstructed access to at least 2 exits is readily available from all points on the floor including lift lobby areas; and</p> <ul style="list-style-type: none"> not less than 9 m apart; and not more than 60 m apart; and located so that alternative paths of travel do not converge such that they become less than 6 m apart.
<p>D1.6</p> <p>Dimensions of Exits and paths of Travel to Exits</p>				X	<p>In a required exit or path of travel to an exit—</p> <p>a) the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm; and</p> <p>b) the unobstructed width of each exit or path of travel to an exit, except for doorways, must be not less than—1 m</p> <p>in any other case except where it opens to a sanitary compartment or bathroom — 750 mm wide;</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
<p>D1.7</p> <p>Travel via Fire Isolated Stairs</p>			X		Not Applicable

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
D1.8 External Stairways or ramps in lieu of Fire Isolated Stairs			X		Not Applicable
D1.9 Travel by non-fire-isolated stairs			X		Not Applicable
D1.10 Discharge from Exits				X	<p>a) An exit must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit, or access to it.</p> <p>(b) If a required exit leads to an open space, the path of travel to the road must have an unobstructed width throughout of not less than—</p> <p>(i) the minimum width of the required exit;</p> <p>(ii) or 1 m,</p> <p>whichever is the greater.</p> <p>(c) If an exit discharges to open space that is at a different level than the public road to which it is connected, the path of travel to the road must be by—</p> <p>(i) a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if required by the Deemed-to-Satisfy Provisions of Part D3; or</p> <p>(d) The discharge point of alternative exits must be located as far apart as practical.</p> <p>(g) The number of persons accommodated must be calculated according to D1.13.</p> <p>Conformation is required to be provided with the application for Construction Certificate detailing that the path or travel to the street is compliant with section D of the BCA.</p>
D1.11 Horizontal Exits			X		Not Applicable
D1.12 Non-required stairways, ramps or escalators			X		<p>A moving walkway—</p> <p>(a) must not be used between storeys in—</p> <p>(b) may connect any number of storeys if it is—</p> <p>(iii) or outside a building;</p>
D1.13 Number of Persons Accommodated Note NSW Table D1.13 Area per person according to use				X	For the purpose of the Deemed-to-Satisfy provisions, the number of persons accommodated in a storey, room or mezzanine must be determined with consideration to the purpose for which it is used and the layout of the floor area by—

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in Table D1.13 according to the use of that part, excluding spaces set aside for—</p> <ul style="list-style-type: none"> (i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and (ii) service ducts and the like, sanitary compartments or other ancillary uses; or <p>(b) reference to the seating capacity in an assembly building or room.</p> <p>(c) any other suitable means of assessing its capacity.</p> <p>Refer NSW Table D1.13 to calculate area per person according to use.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</p>
<p>D1.14</p> <p>Measurement of Distances</p>			X		<p>The nearest part of an exit means in the case of—</p> <ul style="list-style-type: none"> (a) a fire-isolated stairway, fire-isolated passageway, or fire-isolated ramp, the nearest part of the doorway providing access to them; and (b) a non-fire-isolated stairway, the nearest part of the nearest riser; and (c) a non-fire-isolated ramp, the nearest part of the junction of the floor of the ramp and the floor of the storey; and (d) a doorway opening to a road or open space, the nearest part of the doorway; and (e) a horizontal exit, the nearest part of the doorway. <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</p>
<p>D1.15</p> <p>Method of Measurement</p>			X		<p>The following rules apply:</p> <ul style="list-style-type: none"> (a) In the case of a room that is not a sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building, the distance includes the straight-line measurement from any point of the floor of the room to the nearest part of the doorway leading from it, together with the distance from the part of the doorway to the single required exit or point from which travel in different directions to 2 required exits is available. (b) Subject to (d), the distance from the doorway of a sole occupancy unit in a Class 2 or 3 building is measured in a straight line to the nearest part of the required single exit or point from which travel in different directions to 2 required exits is available.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(c) Subject to (d), the distance between exits is measured in a straight line between the nearest parts of those exits.</p> <p>(d) Only the shortest distance is taken along a corridor, hallway, external balcony or other path of travel that curves or changes direction.</p> <p>(e) If more than one corridor, hallway, or other internal path of travel connects required exits, for the purposes of D1.5(c) the measurement is along the path of travel through the point at which travel in different directions to those exits is available, as determined in accordance with D1.4.</p> <p>(f) If a wall (including a demountable internal wall) that does not bound –</p> <p>(i) A room; or</p> <p>(ii) A corridor, hallway or the like, causes a change in direction in proceeding to a required exit, the distance is measured along the path of travel past the wall.</p> <p>(iii) If permanent fixed seating is provided, the distance is measured along the path of travel between the rows of seats.</p>
D1.16 Plant Rooms and lift Motor Rooms: Concession			X		Not Applicable
D1.17 Access to lift pits			X		Not Applicable
Part D2 - Construction of Exits					
D2.1 Application of Part			X		<p>Except for D2.13, D2.14 (a), D2.16, D2.17(d), D2.17(e) and D2.18, the Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of the Class 2 sole-occupancy units.</p> <p>Note NSW D2.1 (entertainment venues)</p>
D2.2 Fire-Isolated stairways and ramps			X		Not Applicable
D2.3 Non-fire Isolated stairways and ramps			X		Not Applicable
D2.4 Separation of Rising and Descending Stairs			X		Not Applicable
D2.5			X		Not Applicable

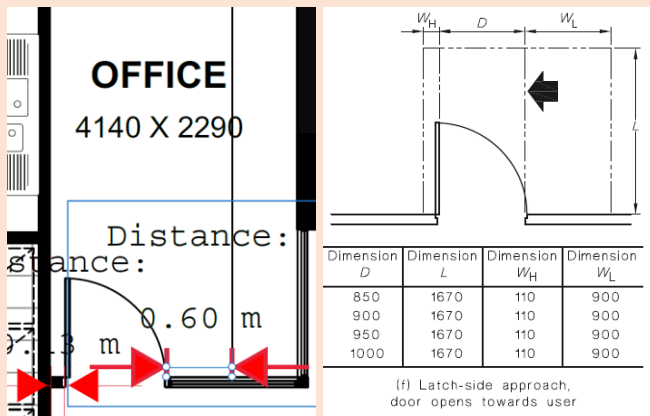
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Open Access ramps and balconies					
D2.6 Smoke Lobbies			X		Not Applicable
D2.7 Installations in Exits and Paths of Travel				X	<p>Gas or other fuel services must not be installed in a required exit</p> <p>Services or equipment comprising of electricity meters, distribution boards, telecommunications distribution boards or equipment, electrical motors or other motors located within the path of travel to an exit must be enclosed with non-combustible construction or a fire protective covering with doorways suitably sealed against smoke spread from the enclosure.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
D2.8 Enclosure of Space Under Stairs and ramps			X		Not Applicable
D2.9 Width of Stairs			X		Not Applicable
D2.10 Pedestrian Ramps				X	<p>(a) A fire isolated ramp may be substituted for a fire isolated stairway if the construction enclosing the ramp and the width and ceiling height comply with the requirements for a fire isolated stairway.</p> <p>(b) A ramp serving as a required exit must –</p> <p>(i) Where the ramp is also serving as an accessible ramp under Part D3, be in accordance with AS1428.1; or</p> <p>(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 Table D2.14 when tested in accordance with AS4586.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
D2.11 Fire-Isolated Passageways			X		Not Applicable
D2.12 Roof as Open Space			X		Not Applicable
D2.13			X		Not Applicable

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Goings & Risers					
D2.14 Landings			X		Not Applicable
D2.15 Thresholds				X	Generally, the threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaves unless the doorway is in a building required to be accessible by Part D3, and in which case the doorway opens to a road or open space and is provided with a threshold ramp or step ramp in accordance with AS 1428.1 - 2009 <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D2.16 Balustrades and other Barriers Note NSW D2.16			X		Not Applicable
D2.17 Handrails			X		Not Applicable
D2.18 Fixed Platforms, walkways and ladders			X		Not Applicable
D2.19 Doorways & Doors			X		Not Applicable
D2.20 Swinging Doors				X	A swinging door in a required exit or forming part of a required exit – (a) Must not encroach – (i) At any part of its swing by more than 500mm of the required width (including any landings) of a required – (A) Stairway; or (B) Ramp; or (C) Passageway, If it is likely to impede the path of travel of the people already using the exit; and The measurement of encroachment in each case is to include door handles or other furniture or attachments to the door; and (b) Must swing in the direction of egress unless

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> (i) It serves a building part with a floor area not more than 200m², it is the only required exit from the building part and it is fitted with a device for holding it in the open position; or (ii) It serves a sanitary compartment or airlock (in which case it may swing in either direction; and (iii) Must not otherwise impede the path or direction of egress. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>
<p>D2.21</p> <p>Operation of Latch</p>				X	<ul style="list-style-type: none"> (a) A door in a required exit, forming part of a required exit or in the path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress by – <ul style="list-style-type: none"> (i) A single hand downward action or pushing action on a single device which is located between 900mm and 1.1 m from the floor and if serving an area required to be accessible by Part D3 – <ul style="list-style-type: none"> (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 center grip section of the handle of not less than 35mm and not more than 45mm; or (ii) a single hand pushing action on a single device which is located between 900mm and 1.2m from the door; and (iii) where the latch operation device referred to in (ii) is not located on the door leaf itself – (A) manual controls to power operated doors must be at least 25mm wide, proud of the surrounding surface and located – <ul style="list-style-type: none"> (aa) not less than 500mm from an internal corner; and (bb) for a hinged door, between 1m and 2m from the door leaf in any position; and (cc) for a sliding door, within 2m of the doorway and clear of a surface mounted door in the open position. (B) Braille and tactile signage complying with Clause 3 and 6 of Specification D3.6 must identify the latch operation device. (b) The requirements of (a) do not apply to a door that – <ul style="list-style-type: none"> (i) Serves a vault, strong-room, sanitary compartment, or the like; or (ii) Serves only, or is within –

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(A) A space which is otherwise inaccessible to persons at all times when the door is locked</p> <p>(iii) Serves –</p> <p>(A) The secure parts of early childhood centre and it can be immediately unlocked –</p> <p>(B) By operating a fail-safe control switch, not contained within the protective enclosure, to actuate a device to unlock the door; or</p> <p>(C) By hand by a person or persons, specifically nominated by the owner, properly instructed as to the duties and responsibilities involved and available at all times when the building is lawfully occupied so that persons in the building or part may immediately escape if there is a fire; or</p> <p>(iv) Is fitted with a fail-safe device which automatically unlocks the door upon the activation of any detector system deemed suitable in accordance with AS1670.1 installed throughout the building, and is readily operable when unlocked;</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.22 Re-entry from Fire isolated exits			X		Not Applicable
D2.23 Signs on Doors			X		Not Applicable
D2.24 Protection of openable windows			X		Not Applicable
D2.25 Timber stairways concession			X		Not Applicable
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA OR INFORMATIONAL	DESIGN DETAIL	COMMENTS

6.0 Part D3 - Access for People with Disabilities

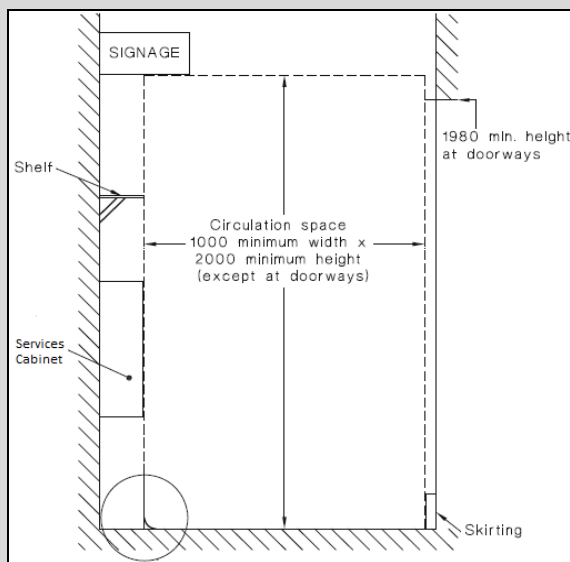
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																				
<p><u>D3.1 - General building access requirements</u></p> <p>Buildings and parts of buildings must be accessible as required by Table D3.1, as follows:</p> <p><u>Class 9b Building</u></p> <p>To and within all areas normally used by the occupants (unless exempt by D3.4)</p>		X			<p>Office Door is to be provided with a 900mm latch side clearance</p> <div><table><tr><th>Dimension D</th><th>Dimension L</th><th>Dimension W_H</th><th>Dimension W_L</th></tr><tr><td>850</td><td>1670</td><td>110</td><td>900</td></tr><tr><td>900</td><td>1670</td><td>110</td><td>900</td></tr><tr><td>950</td><td>1670</td><td>110</td><td>900</td></tr><tr><td>1000</td><td>1670</td><td>110</td><td>900</td></tr></table><p>(f) Latch-side approach, door opens towards user</p></div> <p>The Office, Staff Room, Common area, Laundry, Playroom's 1, 2 & 3 are to be provided with circulation space at the doorway.</p> <p><u>Slip-resistant floor surface/s</u></p> <p>BCA 2015 does not directly specify slip-resistance classification(s) for all accessible paths of travel; however, we highlight the need under AS1428.1-2009 for all accessible paths of travel to have a slip-resistant surface. We recommend you should seek surface finish advice from an independent specialist slip safety consultant.</p> <p>Spatial allowance in the current design indicates that compliance with AS1428.1-2009 is readily achievable.</p> <p>The following summary of AS1428.1-2009 requirements for accessways is provided to assist the project team.</p>	Dimension D	Dimension L	Dimension W _H	Dimension W _L	850	1670	110	900	900	1670	110	900	950	1670	110	900	1000	1670	110	900
Dimension D	Dimension L	Dimension W _H	Dimension W _L																						
850	1670	110	900																						
900	1670	110	900																						
950	1670	110	900																						
1000	1670	110	900																						

Summary of AS1428.1-2009 Requirements for accessways

Continuous accessible path of travel –

All paths of travel shall achieve unobstructed heights and widths in accordance with cl. 6 of AS 1428.1 – see diagram below for detail.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES DOES NOT COMPLY NA or Informational Compliance Required	COMMENTS
---------------------------------	--	----------



Doorways / Doors –

All doorways shall have a minimum luminance contrast of 30% between –
 door leaf and door jamb;
 door leaf and adjacent wall;
 architrave and wall;
 door leaf and architrave;
 door jamb and adjacent wall.

The minimum width of the area of luminance contrast shall be 50mm,

Door hardware should be generally located between 900-1100mm from the floor and be of lever type with a clearance between the handle and the door face at the centre of the handle being not less than 35mm and not more than 45mm in accordance with AS1428.1-2009,

Doors shall have a clear opening width of 850mm.

Door handles, and related hardware shall be of the type that allows the door to be unlocked and opened with one hand. The handle shall be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch.

'D' type handles shall be provided on sliding doors.

Any snibs shall have a lever handle of a minimum length of 45 mm from the centre of the spindle.

For doors (other than fire doors and smoke doors) where a door closer is fitted, the force required at the door handle to operate the door shall not exceed the 20N,

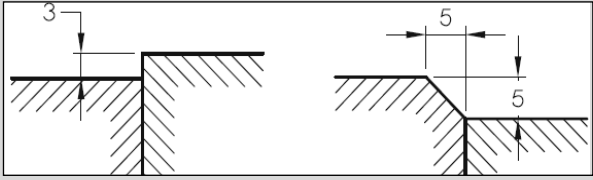
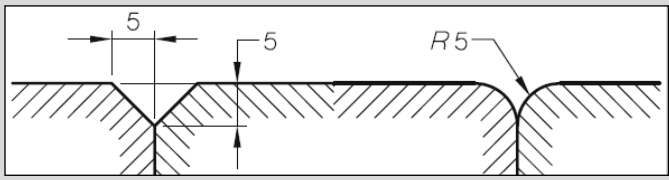
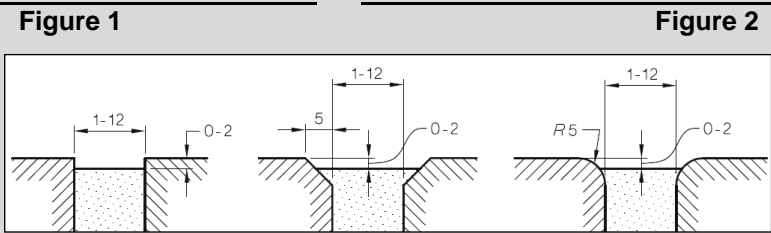
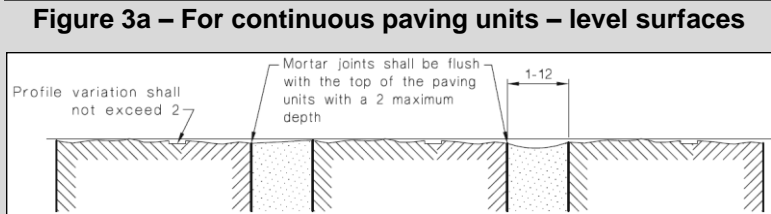
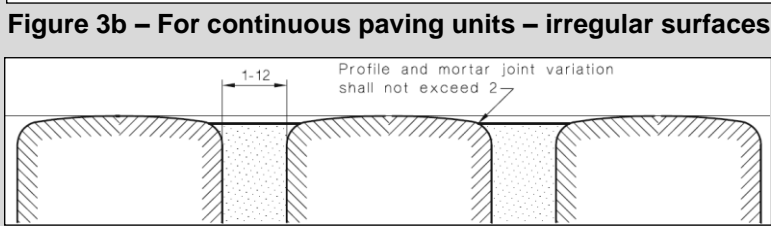
Where an outward opening door is not self-closing, a horizontal handrail or pull bar shall be fixed on the closing face of a side-hung door,

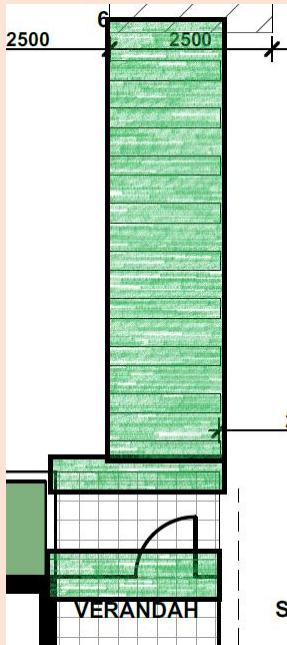
The location of controls for doors and gates above a level surface shall be provided as per Clause 13.5.3.

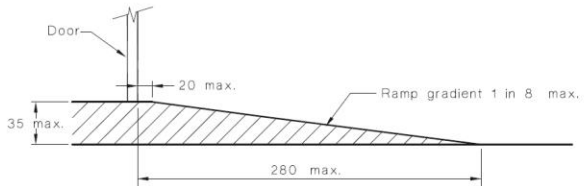
Manual controls for power-operated doors shall be located no closer than 500 mm from an internal corner and between 1000 mm to 2000 mm from the hinged door leaf in any position or clear of a surface-mounted sliding door in the open position.

Push-button controls shall have a minimum dimension of 25 mm diameter and be proud of the surface and shall activate the door before the button becomes level with the surrounding surface.

Floor or ground surfaces on continuous accessible paths of travel and circulation spaces –

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES DOES NOT COMPLY NA or Informational Compliance Required	COMMENTS
<p>A continuous accessible path of travel and any circulation spaces shall have a slip-resistant surface. The texture of the surface shall be traversable by people who use a wheelchair and those with ambulant or sensory disability.</p> <p>Abutment of surfaces shall have a smooth transition. Design transition shall be 0mm, however, construction tolerances are as follows –</p> <p>0 ±3mm vertical change in level – see <i>Figure 1</i></p> <p>0 ±5mm change in level provided the edges have a beveled or rounded edge to reduce the likelihood of tripping – see <i>Figure 2</i></p> <p>Various tolerances for raked joint pavers – see <i>Figure/s 3a - level surfaces, 3b - irregular surfaces & 3c - domed surfaces.</i></p> <div data-bbox="183 638 778 817">  </div> <div data-bbox="826 638 1497 817">  </div> <div data-bbox="464 817 1238 1048">  </div> <div data-bbox="464 1048 1238 1261">  </div> <div data-bbox="464 1261 1238 1485">  </div>		
<p>Where carpets or any soft flexible materials are used on the ground or floor surface –</p> <p>The pile height or pile thickness shall not exceed 11mm and the carpet backing thickness shall not exceed 4mm,</p> <p>Exposed edges of floor covering shall be fastened to the floor surface and shall have a trim along the entire length of any exposed edge,</p> <p>At the leading edges, carpet trims and any soft flexible materials shall have a vertical face no higher than 3mm or a rounded beveled edge no higher than 5mm or above that height a gradient of 1:8 up to a total maximum height of 10mm.</p> <p>Matting recessed within an accessible path of travel –</p> <p>Where of metal and bristle type construction or similar, its surface shall be no more than 3mm if vertical or 5mm if rounded or beveled, above or below the surrounding surface; and</p> <p>Where of a mat or carpet type material, shall have the fully compressed surface level with or above the surrounding surface with a level difference no greater than 3mm if vertical or 5mm if rounded or beveled.</p>		

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>Switches and Controls –</p> <p>All new switches and controls, other than power points, shall be located not less than 900mm nor more than 1100mm above the finished floor and not less than 500mm from internal corners.</p> <p>Rocker action and toggle switches shall be provided an accordance with Clause 14.2 in accessible residential sole-occupancy units.</p>					
<p>D3.2 - Access to Buildings</p> <p>An accessway must be provided to a building required to be accessible:</p> <p>From the main points of pedestrian entry at the allotment boundary; and</p> <p>From another accessible building connected by a pedestrian link; and</p> <p>From any required accessible carparking space on the allotment.</p> <p>An accessway must be provided through the principal pedestrian entrance, and:</p> <p>through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and</p> <p>in a building with a floor area more than 500m², a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance.</p> <p>Doorway on an accessway having multiple leaves must have a clear opening width of not less than 850mm for a single leaf.</p>	x				<p>An accessway must be provided to a building required to be accessible from the main points of a pedestrian entry at the allotment boundary.</p> <div data-bbox="853 674 1497 902"> <p>6.3 Width of a continuous accessible path of travel</p> <p>Unless otherwise specified (such as at doors, curved ramps and similar), the minimum unobstructed width (see Figure 2) of a continuous accessible path of travel shall be 1000 mm and the following shall not intrude into the minimum unobstructed width of a continuous accessible path of travel:</p> <ul style="list-style-type: none"> (a) Fixtures and fittings such as lights, awnings, windows that, when open, intrude into the circulation space, telephones, skirtings and similar objects. (b) Essential fixtures and fittings such as fire hose reels, fire extinguishers and switchboards. (c) Door handles less than 900 mm above the finished floor level. </div> <p>Access way to the building details different floor surfaces. The abutment of surfaces shall have a smooth transition. In the event the difference in level is more than 0 ±3 mm a threshold ramp is required to be provided in accordance with Clause 10.5 of AS1428.1 – 2009</p> 

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>10.5 Threshold ramps</p> <p>Threshold ramps at doorways on a continuous path of travel shall have—</p> <ul style="list-style-type: none"> (a) a maximum rise of 35 mm; (b) a maximum length of 280 mm; (c) a maximum gradient of 1:8; and (d) be located within 20 mm of the door leaf which it serves, as shown in Figure 21. <p>The edges of the threshold ramp shall be tapered or splayed at a minimum of 45° where the ramp does not abut a wall.</p> <p>NOTE: For door controls, see Clause 13.5.</p>  <p>Double doors to be provided with 850mm clear opening for a single leaf.</p> <p>Otherwise, compliance is readily achievable.</p> <p>We refer to the AS1428.1-2009 summary at Clause D3.1 to assist the design team with detailed design and/or construction.</p>
<p><u>D3.3 - Parts of buildings to be accessible</u></p> <p>In a building required to be accessible:</p> <p>every ramp & walkway (<i>except fire-isolated</i>) must comply with Clause 10 of AS1428.1-2009;</p> <p>every stairway (<i>except fire-isolated</i>) must comply with Clause 11 of AS1428.1-2009;</p> <p>All fire-isolated stairways are required to comply with Clause 11.1(f) and (g) of AS 1428.1-2009.</p> <p>Ramp or passenger lift access need not be provided to serve a storey or level other than the entrance storey in a Class 5, 6,7b or 8 building containing not more than 3 storeys and with a floor area for each storey of not more than 200m².</p> <p>the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension</p>			X		<p>Accessways must have passing spaces complying with AS1428.1 at max 20m intervals where a direct line of sight is not available.</p> <p>Turning spaces complying with AS1428.1 within 2m of the end of accessways where it is not possible to continue travelling along the accessway, and at max. 20m intervals along the accessway.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
shall be 11mm, 4mm & 15mm respectively.					

Summary of AS1428.1-2009; Clause 10 & 11 Requirements (Ramps & Stairs)

Clause 10.2 – Walkways

Walkways shall comply with the following:

The floor or ground surface abutting the sides of the walkway shall provide a firm and level surface of a different material to that of the walkway at the same level of the walkway, follow the grade of the walkway and extend horizontally for a minimum of 600 mm unless one of the following is provided:

Kerb in accordance with Figure 18.

Kerb rail and handrail in accordance with Figure 19.

A wall not less than 450 mm in height.

Landings at top and bottom and at:

25m intervals or less for 1:33,

15m intervals or less for 1:20,

For walkways shallower than 1 in 33, no landings are required.

Clause 10.3 – Ramps

Ramps shall comply with the following:

Max 1:14 gradient for ramps exceeding 1.9m,

Gradient constant throughout with max. 3% tolerance and max 1:14 gradient,

Landings at top and bottom and at:

9m intervals or less for 1:14,

15m intervals or less for 1:20,

Change in direction to have 90° angle of approach as per Figure 13,

Handrails on each side as per Clause 12,

Set back min. 900mm from boundary,

Intersections at internal corridors to be set back min. 0.4m,

Handrails to extend min. 300mm horizontally past transition point at top and bottom, except where inner handrail is continuous at intermediate landings,

Kerbs and kerb rails on both sides at min. height of 65mm, not be between 75mm and 150mm high and have no gaps or slots greater than 20mm within the range of 75mm to 150mm,

Kerbs and kerb rails to be located so that ramp-side face is either flush or no greater than 100mm away from handrail (Figure 19), min. 150mm high if handrails has vertical posts (Figure 19 a, b, c), and be min. 200mm between 65mm-75mm kerb to support posts (Figure 19 d).

Clause 10.5 - Threshold ramps

Threshold ramps at doorways to have a max. rise of 35mm, max length of 280mm, max gradient of 1:8 and be located within 20mm of the door leaf.

Edges of the threshold ramp shall be tapered or splayed at max 45° if not abutting a wall.

Clause 10.6 - Step ramps

Step ramps shall have max. rise of 190mm, max. length of 1.9m, max. gradient of 1:10.

Edges of the step ramp to have 45° splay where there is pedestrian traffic or otherwise be protected by suitable barrier such as a min. 450mm wall or kerb / kerb rail with open balustrade.

Step ramps to have slip-resistant surfaces.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p><u>Clause 10.8 - Landings</u></p> <p>Landings for walkways (up to 1:33) and ramps shall comply with one of the following:</p> <ul style="list-style-type: none"> min. 1.2m if no change in direction as per Figure 25(A), min. 1.5m where change in direction not exceeding 90° internal corner to be truncated for min. 500mm in both directions as per Figure 25(B), 180° turn, landing as per Figure 25(C). <p>Landings for step ramps shall be min. 1.2m in length as per Figure 22(A) and (B). Where a change in direction, the length of the step ramp landing to be min. 1.5m as per Figure 22(A). At doorways, landings as per Clause 13.3 for circulation spaces at doorways shown in Figure 25(D).</p> <p>Landings at kerb ramps shall be min. 1.2m in length, or 1.5m X 2.0m at 'T' junctions. Where a single change in direction is required, landings to be min. 1.5m X 1.5m.</p> <p><u>Clause 11.1 - Stair construction</u></p> <p>Stairs to be constructed as follows:</p> <ul style="list-style-type: none"> Set back min. 0.9m from boundary, Where intersection is at an internal corridor, the stair to be set back as per Figure 26(A), Have opaque risers, Nosings shall not project beyond the face of the riser and the riser may be vertical of 25mm backwards splay, Nosing profiles to have a sharp intersection, be rounded up to 5mm radius or be chamfered up to 5mm x 5mm, 50mm – 75mm strip to full length of nosing, set back a max. 15mm from the front of the nosing, with a 30% min. luminance contrast. If not set back, luminance contrast to extend down the riser by max 10mm. <p>TGSIs installed as per AS1428.4.1.</p> <p><u>Clause 11.2 - Stairway handrails</u></p> <p>Handrails to be continuous throughout the stair flight and around landings and have no obstructions 0.6m above, and as follows:</p> <ul style="list-style-type: none"> Design & construction as per Clause 12, Installed both sides, No vertical sections and shall follow angle of the stairway nosings, Extend at bottom of stairs one stair tread depth and min. 300mm horizontally, (300mm extension not required if handrail is continuous, Dimensions of heights of handrails taken vertically from the nosing or landing to the top of the handrail. <p><u>Clause 12 - Handrails</u></p> <p>Design and construction to comply with:</p> <ul style="list-style-type: none"> Handrails and balustrades shall not encroach into required circulation, Circular or elliptical cross-section, not less than 30mm or more than 50mm for more than 270°. Elliptical handrails to have greater horizontal dimensions, Exposed edges or corners have min. radius of 5mm, Top of handrail to be between 865mm and 1.0m above nosing or landing, Height to be constant throughout, If balustrade is required at a height greater than the handrail, both shall be provided, 					

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>Handrails to be securely fixed and rigid with ends turned through a total of 180°, or to the ground, or returned fully to end post or wall face (Figures 26 C and D), Min. 50mm clearance to adjacent wall or other obstruction, for a height of 600mm, Handrails to have no obstructions to the passage of a hand along the rail, Inside handrail at landings to always be continuous as per Figure 28(a).</p>					
<p><u>D3.4 - Exemptions</u></p> <p>An area where access would be inappropriate because of the particular purpose for which the area is used or would pose a health or safety risk for people with a disability; is not required to be accessible.</p>			X		<p>Exemptions are to be reviewed on a case by case basis and when detailed design is achieved. Although, we do highlight that the following parts of the building have been offered access exemption (not exhaustive):</p> <ul style="list-style-type: none"> • Electrical rooms. • Plant & equipment room(s). • Service rooms. • Storage Rooms • Cot Rooms • Kitchen • Bottle Prep Room • Laundry
<p><u>D3.5 - Accessible carparking</u></p> <p>Accessible carparking spaces complying with AS2890.6-2009 must be provided in accordance with Table D3.5 in a Class 7a building required to be accessible and on the same allotment as a building required to be accessible.</p> <p><u>Class 9b Childcare</u></p> <p>1 space for every 100 carparking spaces or part thereof.</p>	X				<p>1x Accessible carparking space is provided for the Childcare.</p> <p>The accessible car parking spaces are provided in location and size to comply with the requirements of AS2890.6-2009.</p> <p>A bollard shall be provided at the center of the shared zone and set back 800mm ±50mm from the front of the space.</p> <p>The following design detail to be addressed:</p> <p>The shared zone is required to be 5.4m long and be such that it is the same depth as the carparking space. The current design has a reduced shared zone to the space to the eastern wall of the lobby.</p> <p>Ensure the location of structural column is such that it is not within the shared zone unless it is provided in the location of the required bollard.</p> <p>The following summary of the requirements of AS2890.6 are provided to assist the design team during detailed design &/or construction.</p>
<p><u>Summary of AS2890.6-2009</u></p> <p><u>Clause 2.3 – Pavement slope & surface</u></p> <p>Accessible parking space and shared zones are to have a firm plane surface with a fall not exceeding 1:40 in any direction (1:33 if the surface is a bituminous seal and the parking space is out of doors). These areas shall have a slip-resistant surface.</p> <p><u>Clause 2.4 – Headroom</u></p>					

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>The path of vehicular travel from the car park entrance to all accessible parking spaces and from those spaces to the car park exit shall have a minimum headroom of 2,200 mm.</p> <p>The headroom above each dedicated space and adjacent shared area, measured from the level of the dedicated space shall be a minimum of 2,500 mm. For an angle parking space the headroom of the front of the space and its adjacent shared area may be reduced to lie within the profile shown in Figure 2.7.</p> <p><u>Clause 3.1 – Space identification</u></p> <p>Each dedicated space shall be identified by means of a white symbol of access in accordance with AS 1428.1 between 800 mm and 1,000 mm high placed on a blue rectangle with no side more than 1,200 mm, placed as a pavement marking in the centre of the space between 500 mm and 600 mm from its entry point as illustrated in Figure 3.1.</p> <p><u>Clause 3.2 – Space delineation</u></p> <p>Pavement markings specified in Items (a) and (b) of this Clause shall be yellow and shall have a slip resistant surface. Raised pavement markers shall not be used for space delineation.</p> <p>Pavement markings shall be provided as follows:</p> <p>Dedicated parking spaces shall be outlined with unbroken lines 80 to 100 mm wide on all sides excepting any side delineated by a kerb, barrier or wall.</p> <p>Shared areas shall be marked as follows:</p> <p>Walkways within or partly within a shared area shall be marked with unbroken longitudinal lines on both sides of the walkway excepting any side delineated by a kerb, barrier or wall.</p> <p>Other vacant non-trafficked areas, which may be intentionally or unintentionally obstructed (e.g. by unintended parking), shall be outlined with unbroken lines 80 to 100 mm wide on all sides excepting any side delineated by a kerb, barrier or wall, and marked with diagonal stripes 150 to 200 mm wide with spaces 200 mm to 300 mm between stripes. The stripes shall be at an angle of 45 ±10 degrees to the side of the space.</p> <p>No shared area markings shall be placed in trafficked areas.</p>					
<p>D3.6- Signage</p> <p>Accessible buildings must have signage to comply with AS1428.1-2009 and as follows –</p> <p>braille and tactile signage incorporating the international symbol of access or deafness, must identify each sanitary facility and space with hearing augmentation system; and</p> <p>identify each door required by Clause E4.5 to be provided with an exit sign and state “Exit” and “Level” followed by the floor number;</p> <p>signage incorporating the international symbol of access or deafness, must be provided within a room containing a hearing augmentation system identifying the hearing</p>				X	<p>Signage shall be installed in this project as necessary, but shall include as a minimum:</p> <p>identify each door required by Clause E4.5 to be provided with an exit sign and state “Exit” and “Level” followed by the floor number, as includes braille and tactile signage;</p> <p>signage in accordance with AS1428.1 must be provided for accessible unisex sanitary facilities to identify left or right-handed use;</p> <p>directional signage where a bank of sanitary facilities are not provided with an accessible sanitary facility.</p> <p>All signage is to be design detailed to comply with the relevant requirements of Specification D3.6. In this regard, the following Specification D3.6 summary is provided to assist the project team.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>augmentation type, area covered and location of receivers;</p> <p>signage in accordance with AS1428.1 must be provided for accessible unisex sanitary facilities to identify left or right handed use;</p> <p>signage to ambulant accessible facility must be on the door of the facility;</p> <p>directional signage where a pedestrian entrance is not accessible,</p> <p>directional signage where a bank of sanitary facilities are not provided with an accessible sanitary facility.</p>					

Summary of Specification D3.6: Braille and tactile signs

Part 2 – Location of braille and tactile signs

Signage must be designed and installed as follows:

Braille and tactile components located not less than 1.2m or greater than 1.6m;

Single line signs to have tactile characters not less than 1.25m or greater than 1.35m;

Signs identifying room features or facilities located on wall on the latch side of the door with edge of sign 50mm to 300mm from the architrave (or on the door itself if not possible to have adjacent).

Signs identifying a door required by E4.5 to be provided with an exit sign, must be located on the side that faces a person seeking egress, and on the wall on the latch side of the door with the leading edge of the sign located between 50mm and 300mm from the architrave (or on the door itself if not possible adjacent).

Part 3 – Braille and tactile sign specification

Tactile characters to be raised or embossed to a height between 1mm and 1.5mm;

Sentence case must be used, with 15mm to 50mm high characters for capitals and 50% high for the lower case;

Tactile characters, symbols and the entire sign / frame to have rounded edges;

The entire sign including characters, background, negative space or fill of signs to be matt or low gloss finish;

Min. letter spacing to be 2mm;

Min. word spacing to be 10mm;

Thickness of letter strokes between 2mm and 7mm and of Arial typeface;

Tactile text to be left justified (excluding single words).

Part 4 – Luminance contrast

Background, negative space and fill to be min. 30% luminance contrast to the mounted surface,

Tactile characters icons & symbols to be min 30% luminance contrast to the background or mount surface,

Luminance contrasts must be met under the lighting conditions of its surrounds.

Part 5 – Lighting

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>Braille and tactile signs must be illuminated to ensure luminance contrast requirements are met at all times during which the sign is required to be read.</p> <p><u>Part 6 – Braille</u></p> <p>Grade 1 braille (uncontracted) as per Australian Braille Authority, Raised and domed, and left justified, Located 8mm below bottom line of text, Solid arrow, if arrow provided, On signs with multiple lines, semicircular braille locator at the left margin must be horizontally aligned with the first line of braille text.</p>					
<p><u>D3.7 - Hearing augmentation</u></p> <p>Hearing augmentation system must be provided where an inbuilt amplification system (other than emergency warning) is installed:</p> <p>In a room in a Class 9b building; or Meeting room, conference room, auditorium, or room for judicatory purposes; or At any ticket office, teller' s booth, reception area or the like, where the public is screened from the service provider.</p>			X		Not applicable.
<p><u>D3.8 - Tactile ground surface indicators (TGSI)</u></p> <p>Accessible buildings must have TGSI's complying with Sections 1 & 2 of AS/NZS1428.4.1-2009 to warn blind or vision impaired people of approaching stairways (other than fire-isolated), escalators, ramps (other than fire-isolated, step or kerb ramp), any overhead obstruction less than 2m above floor level and an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building.</p>				X	<p>TGSI's are to be provided to –</p> <p>any overhead obstruction less than 2m above floor level.</p> <p>top and bottom of all stairways and ramps (except fire-isolated stairways).</p> <p>where an accessway meets a vehicular way adjacent to any pedestrian entrance to a building</p>
<p><u>D3.9 - Wheelchair seating spaces in Class 9b assembly buildings</u></p> <p>Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces complying with AS 1428.1 must be provided in accordance with Table D3.9.</p>			X		No Class 9b parts with seating proposed.
<p><u>D3.10 - Swimming pools</u></p>			X		Not applicable

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>Not less than one means of accessible water entry/exit in accordance with Specification D3.10 for each swimming pool required by Table D3.1 to be accessible.</p> <p>Where a swimming pool has a perimeter of more than 70 m in length, at least one accessible water entry/exit must be provided by means of –</p> <ul style="list-style-type: none"> a fixed or movable ramp and an aquatic wheelchair; or a zero-depth entry at a maximum gradient of 1:14 and an aquatic wheelchair; or a platform swimming pool lift and an aquatic wheelchair; or a sling-style swimming pool lift. <p>Latching devices on gates and doors forming part of a swimming pool safety barrier need not comply with AS1428.1.</p>					
<p><u>D3.11 - Ramps</u></p> <p>On an accessway; a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and a landing for a step ramp must not overlap a landing for another step ramp or ramp.</p>			X		Not Applicable
<p><u>D3.12 - Glazing on an accessway</u></p> <p>Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights, including any glazing capable of being mistaken for a doorway or opening, shall be clearly marked for their full width with a solid contrasting line.</p> <p>The contrasting line shall be not less than 75mm wide and shall extend across the full width the glazing panel. The lower edge of the contrasting line shall be located between 900mm and 1000mm above the plane of the finished floor level.</p> <p>Any contrasting line on the glazing shall provide a minimum of 30%</p>				X	Any such glazing on an accessway must be clearly marked in accordance with AS 1428.1-2009.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
luminance contrast when viewed against the floor surface or surfaces within 2m of the glazing on the opposite side.					
SECTION E					
SERVICES AND EQUIPMENT					
PART E3					
LIFT INSTALLATIONS					
<u>E3.6 - Passenger lifts</u> Every passenger lift must: be one of the types identified in Table E3.6a, subject to the limitations on use specified in the Table; and have accessible features in accordance with Table E3.6b; and not rely on a constant pressure device for its operation if the lift car is fully enclosed.			X		Not Applicable
SECTION F					
HEALTH AND AMENITY					
PART F2					
SANITARY AND OTHER FACILITIES					
<u>F2.4 - Accessible sanitary facilities</u> In a building required to be accessible: Accessible unisex sanitary compartments must be provided as per Table F2.4(a), Accessible unisex showers must be provided as per Table F2.4(b), At each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females. An accessible unisex sanitary compartment must contain a	X				Accessible sanitary facilities have been indicated on Ground Level. Fixtures and fittings within the accessible sanitary facilities shall comply with the requirements of Part 15 of AS1428.1-2009. Layout should make allowance for a 2,300mm x 2,630mm compartment. Compliance is readily achievable A sanitary compartment suitable for a person with an ambulant disability in accordance with Part 16 of AS1428.1 must be provided for use by males and females. The following summary of requirements for accessible sanitary facilities is provided to assist the project team during detailed design &/or construction.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>closet pan, washbasin, shelf or bench top and adequate disposal of sanitary towels.</p> <p>Circulation spaces, fixtures and fittings of all accessible sanitary facilities must comply with AS1428.1.</p> <p>Where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right-handed mirror image facilities must be provided as evenly as possible.</p> <p>An accessible unisex facility must be located so that it can be entered without crossing an area reserved for one sex.</p>					

Summary of AS1428.1-2009 requirements for Accessible & Ambulant Sanitary Facilities

Water Taps – Must have:

Taps shall have lever handles, sensor plates or other similar control,
 Lever handles to be min. 50mm clear from adjacent surface,
 Where hot water is provided, the water to be delivered through the mixing spout.

WC pan clearances

WC pan clearance including set-out, seat height and seat width as per Figure 38 of AS1428.1.

Seat – As follows:

full round type with minimal contours,
 be securely fixed when in use,
 seat fixings that create lateral stability,
 load rated to 150kgs,
 min. luminance contrast of 30%.

Backrest – As follows:

be capable of withstanding 1100 N,
 height to the lower edge of backrest to the top of the WC pan of 120mm to 150mm,
 vertical height of 150mm-200mm and a width of 350mm and 400mm,
 front edge of the centre of the backrest to be at an angle of 95° to 100°.

Flushing control

Flushing controls shall be user activated, either hand operated or automatic. Hand-operated controls to comply with Figure 40, or on the centre-line of the toilet within the vertical limit zone. Controls within this zone shall not be within the area required for grabrails.

Controls shall be proud of the surface and activate the flush before being level with the surrounding surface.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p><u>Toilet paper dispenser</u></p> <p>Toilet paper dispenser to be located within zone specified in Figure 41. Dispenser shall not encroach on required grabrail clearances.</p> <p><u>Grabrails</u></p> <p>Concealed, high level cisterns or flush valves require a continuous grabrail across the rear wall and the side wall closest to the pan as per Figure 42.</p> <p>Low-level non-concealed cistern or flush valves require the grabrail to terminate each side of the cistern as per Figure 42.</p> <p><u>Circulation space</u> – Shall be as per Figure 43 of AS1428.1-2009, except for the following intrusions:</p> <p>Toilet paper dispenser, Grabrails, Washbasins with 100mm intrusion, Hand dryers and towel dispensers, Soap dispensers, Shelves, Wall cabinets with 150mm intrusion, mounted between 0.9m and 1.25m, Clothes hanging devices, Portable sanitary disposal units (Figure 43), Other wall mounted fixtures with 150mm intrusion, mounted between 0.9m and 1.25m. The overlapping of circulation space shall be in accordance with Clause 15.6.</p> <p><u>Baby change tables</u></p> <p>Where installed, baby change tables shall not encroach into the required circulation space when in the folded position and have a max height of 820mm with clearance underneath of min. 720mm when open.</p> <p><u>WC doors</u></p> <p>To be either hinged or sliding, Outward-opening doors shall have a mechanism to hold in the closed position without the use of a latch, Doors provided with an in-use indicator and a bolt or catch. If fitted with a snib, the snib handle is to be min. length of 45mm from the centre of the spindle. Latch mechanism are to be openable from the outside in the case of an emergency. Force required as per Clause 13.5.2(e), Door handles and hardware as per Clause 13.5.</p> <p><u>Washbasins for unisex accessible sanitary facilities</u></p> <p>A hand-washing facility shall be provided inside the toilet cubicle</p> <p><u>Washbasins</u> – As follows:</p> <p>Shall be located inside the cubicle,</p>					

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>Washbasin outside pan circulation, Water taps as per Clause 15.2.1, Exposed hot water supply pipes to be insulated or located so as not a hazard, Projection of washbasins from wall and taps, bowl and drain outlet as per Figures 44 (A) and (B), Water supply pipes and waste outlets not to encroach on required clear space under basin. Each washbasin fixture to have unobstructed circulation space as per Figure 46, or Figure 45 for SOU's.</p>					
<p><u>Mirrors</u></p>					
<p>Mirror to be located above or adjacent to washbasin. Where provided, a vertical mirror with a reflective surface not less than 350mm wide to extend from a height not less than 0.6m to not more than 1.85m. In an accessible residential unit, the mirror to be centred over the washbasin.</p>					
<p><u>Shelves</u> – To be provided adjacent to washbasin, as follows:</p>					
<p>A vanity top at a height of 800mm-830mm and min. width of 1200mm and depth of 300mm-400mm without encroaching circulation space, A separate fixture, within any circulation spaces at a height of 0.9m-1.0m, and external to all circulation space 0.79m-1.0m.</p>					
<p><u>Soap dispensers, towel dispenser and similar fittings</u></p>					
<p>Soap and towel dispensers and hand dryers shall be operable by one hand and installed so the operative component or outlet between 0.9m and 1.1m and no closer than 0.5m from an internal corner.</p>					
<p><u>Clothes-hanging devices</u></p>					
<p>A clothes-hanging device shall be installed 1.2m to 1.35m high and not less than 0.5m from an internal corner.</p>					
<p><u>Sanitary disposal unit</u></p>					
<p>Where provided, sanitary disposal units to be as per Figure 43 for portable units or 0.5m from the pan for recessed units.</p>					
<p><u>Switches and general-purpose outlets</u></p>					
<p>Where provided near the washbasin, switches and GPOs to be located as per Clause 14 and as close to the shelf as possible.</p>					
<p><u>Showers</u></p>					
<p>Shower recesses and circulation space to a height not less than 0.9m as per Figure 47. Grabrails, shower hose fittings, taps, soap holder, shelf and seat are the only fixtures permitted in these spaces.</p>					
<p><u>Circulation spaces in accessible sanitary facilities</u></p>					
<p>Circulation spaces in accessible sanitary facilities shall be in accordance with Clause 15.2.8 and Figures 43-47 and 50.</p>					
<p>Circulation spaces, including door circulation space, may be overlapped.</p>					

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
<p>Fixtures shall not encroach circulation space except:</p> <p>Washbasin in WC circulation as per Figure 43,</p> <p>Washbasin in shower circulation as per Figure 50,</p> <p>Washbasin in door circulation as per Figure 51(A) and 51(B).</p> <p>Clearances beneath washbasin as per Clause 15.3.</p> <p><u>Summary of AS1428.1-2009 requirements for Ambulant Sanitary Facilities</u></p> <p><u>General</u></p> <p>Ambulant sanitary facilities shall be in accordance with Figures 53(A) and 53(B).</p> <p><u>Grabrails</u></p> <p>Grabrails shall be installed in accordance with Clause 17 and Figure 53(A).</p> <p><u>Doors</u></p> <p>Doors to sanitary compartments for people with ambulant disabilities shall have openings with a minimum clear width of 700 mm, and shall comply with Figure 53(B).</p> <p>Doors shall be provided with an in-use indicator and a bolt or catch. Where a snib catch is used, the snib handle shall have a minimum length of 45 mm from the centre of the spindle. In an emergency, the latch mechanism shall be openable from the outside.</p> <p><u>Coat hook</u></p> <p>A coat hook shall be provided within the sanitary compartment and at a height between 1350 mm to 1500 mm from the floor.</p>					

SECTION E SERVICES & EQUIPMENT

Part E1

Fire Fighting Equipment

E1.3 Fire Hydrants			X		Not Applicable
E1.4 Fire Hose Reels			X		Not Applicable
E1.5 Sprinklers			X		Not Applicable
E1.6 Portable Fire Extinguishers				X	(a) Portable fire extinguishers must be – (i) Provided as listed in Table E1.6; (ii) For a Class 2, 3, or 5 building or Class 4 part of a building, provided –

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(A) To serve the whole Class 2, 3, or 5 building or Class 4 part of a building where one or more internal fire hydrants are installed; or</p> <p>(B) Where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500m², and for the purpose of this clause, a sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building is considered to be a fire compartment; and</p> <p>(i) Subject (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 or 3 building or Class 4 part of a building must be –</p> <p>(i) An ABE type fire extinguisher; and</p> <p>(j) A minimum size of 2.5kg; and</p> <p>(k) Distributed outside a sole occupancy unit –</p> <p>(A) To serve only the storey on which they are located; and</p> <p>(i) So that the travel distance from the entrance doorway of any sole occupancy unit to the nearest fire extinguisher is not more than 10m.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
E1.8 Fire Control Centre			X		Not Applicable
E1.9 Fire Precautions during construction				X	<p>In a building under construction –</p> <p>(a) not less than one portable fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required / temporary exit; and</p> <p>(b) After the building has reach an effective height of 12m –</p> <p>(i) the required fire hydrants and fire hose reels must be operational on all floor / roof covered storeys, except for the 2 uppermost storeys; and</p> <p>(ii) Any required booster connections must be installed.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
E1.10 Provision for Special Hazards			X		Not Applicable


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Part E2 Smoke Hazard Management					
E2.2 General Requirements (inclusive of Table E2.2a / Table E2.2b & NSW amendments) (i) NSW Table E2.2b Specific provisions				X	<p><u>General smoke hazard management requirements</u></p> <p>A building must comply with Table E2.2a as applicable to Class 2 to 9 buildings and Table E2.2b as applicable to Class 6 and 9b buildings such that each separate part complies with the relevant provisions for the classification.</p> <p><u>9b Building</u></p> <p><u>Automatic shutdown:</u></p> <p>A building or part of a building used as an assembly building must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS 1668.1) which does not form part of the smoke hazard management system, on the activation of—</p> <ul style="list-style-type: none"> (i) smoke detectors installed complying with Clause 6 of Specification E2.2a. <p><u>Clause 6</u></p> <ul style="list-style-type: none"> (b) Smoke detectors required to activate— <ul style="list-style-type: none"> (i) automatic shutdown of air-handling systems in accordance with Table E2.2b; must be (ii) be spaced— <ul style="list-style-type: none"> (A) not more than 20 m apart and not more than 10 m from any wall, bulkhead or smoke curtain; and (B) in enclosed malls and walkways in a Class 6 building not more than 15 m apart and not more than 7.5 m from any wall, bulkhead or curtain; and (ii) have a sensitivity— <ul style="list-style-type: none"> (A) in accordance with AS 1670.1 in areas other than a multi-storey walkway and mall in a Class 6 building; (iii) Smoke detectors provided to activate a smoke control system must— <ul style="list-style-type: none"> (A) form part of a building fire or smoke detection system complying with AS 1670.1; or (B) be a separate dedicated system incorporating control and indicating equipment complying with AS 1670.1; and (iv) activate a building occupant warning system complying with Clause 7, except that smoke detectors provided solely to initiate automatic shutdown of air-handling systems in accordance with (b)(i) <u>need not activate a building occupant warning system.</u>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i>
E2.3 Provision for Special Hazards			X		Not Applicable
Part E3 Lift Installations					
E3.1 Lift installations			X		Not Applicable
E3.2 Stretcher Facility in Lifts			X		Not Applicable
E3.3 Warning Against the use of lifts in Fire			X		Not Applicable
E3.4 Emergency Lifts			X		Not Applicable
E3.5 Landings			X		Not Applicable
E3.6 Facilities for People with Disabilities			X		Not Applicable
E3.7 Fire Service Controls			X		Not Applicable
E3.8 Residential Care Buildings			X		Not Applicable
E3.9 Fire service recall operation switch			X		Not Applicable
E3.10 Lift car fire service drive control switch			X		Not Applicable
Part E4 Visibility in an Emergency Exit signs and Warning Systems					

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
E4.2 Emergency Lighting Requirements				X	Emergency lighting must be provided throughout the building relevant to the requirements of this clause. <i>Electrical Design Certification must be incorporated into the construction certificate specification</i>
E4.3 Measurement of Distance			X		Distances, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.
E4.4 Design and Operation of Emergency Lighting			X		The emergency lighting system must comply with AS/NZS 2293.1-2005.
E4.5 Exit Signs				X	Exit signs must be provided to doors serving as or forming part of a required throughout the buildings in accordance with AS/NZS 2293.1-2005. <i>Electrical design plans and certification must be incorporated into the construction certificate specification</i>
E4.6 Direction Signs (inclusive of NSW E4.6)				X	<u>Generally</u> , if an exit is not readily apparent to persons occupying or visiting the building then directional exit signs must be installed in appropriate positions. Class 9b buildings used as an entertainment venue - Exit signs must also be installed on external egress paths to a street, where the exit from the building does not open directly onto the street. <i>Electrical Design Certification must be incorporated into the construction certificate specification and directional exit sign locations must be illustrated on the architectural floor plans</i>
E4.7 Class 2 & 3 Buildings & Class 4 Parts: Exemption			X		Informational clause - Exit doors in Class 2 parts need not comply with E4.5 provided every exit door is clearly and legibly labelled on the side remote from the exit with the word "EXIT" in capital letters 25mm high in a colour contrasting with that of the background or some other suitable method.
E4.8 Design & Operation of Exit Signs				X	Exit signs must comply with: (i) AS/NZS 2293.1-2005; or (ii) For a photoluminescent exit sign, Specification E4.8. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E4.9			X		Not Applicable

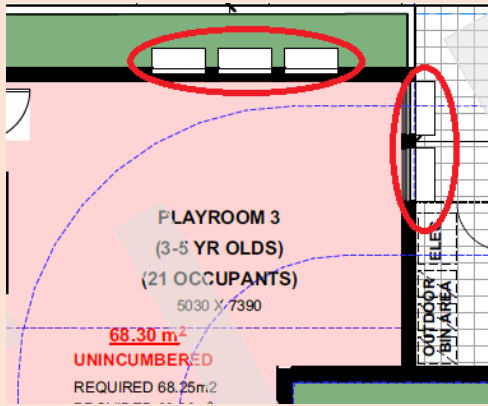
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Emergency Warning & Intercom Systems					
SECTION F					
HEALTH & AMENITY					
Part F1					
Damp & Weatherproofing					
F1.0 Deemed -to-Satisfy Provisions			X		<p>Performance Requirements FP1.4, for the prevention of the penetration of water through external wall, must be complied.</p> <p>There are no Deemed -to Satisfy Provisions for this Performance Solution in respect to external walls.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F1.1 Stormwater Drainage				X	<p>Stormwater drainage must comply with AS/NZS 3500.3-2015.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F1.4 External above ground membranes				X	<p>Any external above ground membranes must be waterproofed as per AS 4654 Parts 1 and 2-2012.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F1.5 Roof coverings				X	<p>A roof must be covered with—</p> <p>(a)concrete roofing tiles complying with AS 2049 and fixed, except in cyclonic areas, in accordance with AS 2050, as appropriate; or</p> <p>(b)terracotta roofing tiles complying with AS 2049 and fixed, except in cyclonic areas, in accordance with AS 2050; or</p> <p>(c)cellulose cement corrugated sheeting complying with AS/NZS 2908.1 and installed in accordance with AS/NZS 1562.2; or</p> <p>(d)metal sheet roofing complying with AS 1562.1; or</p> <p>(e)plastic sheet roofing designed and installed in accordance with AS/NZS 4256 Parts 1, 2, 3 and 5 and AS/NZS 1562.3; or</p> <p>(f)asphalt shingles complying with ASTM D3018-90, Class A.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F1.6 Sarking				X	Sarking-type materials used for weatherproofing must comply with AS/NZS 4200.1 and AS 4200.2. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F1.7 Waterproofing of wet area				X	Wet areas must be waterproofed in accordance with AS 3740-2010 and F1.7 & Table F1.7 of the BCA. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F1.9 Damp-proofing				X	Where a damp-proof course is required, it must consist of a material that complies with AS/NZS 2904-1995; or impervious sheet material in accordance with AS 3660.1-2000 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F1.10 Damp-proofing of floors on the ground				X	If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870-2011 (N/A to areas that do not require weatherproofing – refer specific clause exemptions). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F1.11 Provision of Floor Wastes			X		Not Applicable
F1.12 Sub Floor Ventilation			X		Information clause relevant to the ventilation of sub-floor spaces located between a suspended floor of a building and the ground.
F1.13 Glazed Assemblies				X	Information clause relevant to the provision of glazed assemblies within external walls in accordance with AS 2047-1999. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part F2 Sanitary & Other Facilities					

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
F2.1 Facilities in residential buildings				X	Information clause detailing the minimum sanitary facilities required in Class 2, 3, 4 and 9c aged care residential buildings. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F2.2 Calculation of number of occupants and fixtures			X		Informational clause. <ul style="list-style-type: none"> The number of persons accommodated must be calculated according to D1.13 if it cannot be more accurately determined by other means. Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females. In calculating the number of sanitary facilities to be provided under F2.1 and F2.3, a unisex facility required for people with a disability may be counted once for each sex. <p>For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary towels.</p>
F2.3 Facilities for Class 3 to 9 Buildings A Class 9b early childhood centre must be provided with— (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>(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, shower or shower-bath; and</p>		X			<ul style="list-style-type: none"> <i>The Kitchen location does not permit the ability to facilitate supervision of children from Playroom 1.</i>  <i>The childcare centre is to be provided with one bath or shower.</i> <i>For children younger than 3 years old</i> <ul style="list-style-type: none"> <i>The Laundry is to be provided with a washtub</i> <i>A bench type baby bath, which is within 1m of a nappy change bench</i> <i>a nappy changing bench which—</i> <ul style="list-style-type: none"> <i>is within 1 m of separate adult hand washing facilities and bench type baby bath; and</i> <i>must be not less than 0.9 m2 in area and at a height of not less than 850 mm, but not more than 900 mm above the finished floor level; and</i>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																																																																							
<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 0.9 m² 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>is positioned to permit a staff member changing a nappy to have visibility of the play area at all times.</p>					<ul style="list-style-type: none">▪ must have a space not less than 800 mm high, 500 mm wide and 800 mm deep for the storage of steps; and▪ is positioned to permit a staff member changing a nappy to have visibility of the play area at all times.• 4x children junior pans are required and 4x washbasins with a rim height not exceeding 600mm are required to be provided that have access from both indoor and outdoor play areas. <table><tr><th>User Group</th><th colspan="2">Closet Pans</th></tr><tr><th></th><th>Design Occupancy</th><th>Number</th></tr><tr><td colspan="3">Class 3, 5, 6 and 9 other than schools</td></tr><tr><td rowspan="2">Male employees</td><td>1 — 20</td><td>1</td></tr><tr><td>> 20</td><td>Add 1 per 20</td></tr><tr><td rowspan="2">Female employees</td><td>1 — 15</td><td>1</td></tr><tr><td>> 15</td><td>Add 1 per 15</td></tr></table> <table><tr><th colspan="2">Washbasins</th></tr><tr><th>Design Occupancy</th><th>Number</th></tr><tr><td>1 — 30</td><td>1</td></tr><tr><td>> 30</td><td>Add 1 per 30</td></tr><tr><td>1 — 30</td><td>1</td></tr><tr><td>> 30</td><td>Add 1 per 30</td></tr></table> <table><tr><th colspan="2">Urinals</th></tr><tr><th>Design Occupancy</th><th>Number</th></tr><tr><td>1 — 10</td><td>0</td></tr><tr><td>11 — 25</td><td>1</td></tr><tr><td>26 — 50</td><td>2</td></tr><tr><td>>50</td><td>Add 1 per 50</td></tr><tr><td>N/A</td><td>N/A</td></tr></table> <table><tr><th colspan="2">Washbasins</th></tr><tr><th>Design Occupancy</th><th>Number</th></tr><tr><td>1 — 30</td><td>2</td></tr><tr><td>> 30</td><td>Add 1 per 15</td></tr><tr><th colspan="2">Urinals</th></tr><tr><td>N/A</td><td>N/A</td></tr></table> <table><tr><th>User Group</th><th colspan="2">Closet Pans</th></tr><tr><th></th><th>Design Occupancy</th><th>Number</th></tr><tr><td colspan="3">Class 9b — early childhood centres</td></tr><tr><td rowspan="2">Children</td><td>1 — 30</td><td>2</td></tr><tr><td>> 30</td><td>Add 1 per 15</td></tr></table> <p>Note: Facilities for use by children must be—</p> <p>(a) junior pans; and</p> <p>(b) washbasins with a rim height not exceeding 600mm; and</p> <p>(c) accessible from both indoor and outdoor play areas.</p>	User Group	Closet Pans			Design Occupancy	Number	Class 3, 5, 6 and 9 other than schools			Male employees	1 — 20	1	> 20	Add 1 per 20	Female employees	1 — 15	1	> 15	Add 1 per 15	Washbasins		Design Occupancy	Number	1 — 30	1	> 30	Add 1 per 30	1 — 30	1	> 30	Add 1 per 30	Urinals		Design Occupancy	Number	1 — 10	0	11 — 25	1	26 — 50	2	>50	Add 1 per 50	N/A	N/A	Washbasins		Design Occupancy	Number	1 — 30	2	> 30	Add 1 per 15	Urinals		N/A	N/A	User Group	Closet Pans			Design Occupancy	Number	Class 9b — early childhood centres			Children	1 — 30	2	> 30	Add 1 per 15
User Group	Closet Pans																																																																											
	Design Occupancy	Number																																																																										
Class 3, 5, 6 and 9 other than schools																																																																												
Male employees	1 — 20	1																																																																										
	> 20	Add 1 per 20																																																																										
Female employees	1 — 15	1																																																																										
	> 15	Add 1 per 15																																																																										
Washbasins																																																																												
Design Occupancy	Number																																																																											
1 — 30	1																																																																											
> 30	Add 1 per 30																																																																											
1 — 30	1																																																																											
> 30	Add 1 per 30																																																																											
Urinals																																																																												
Design Occupancy	Number																																																																											
1 — 10	0																																																																											
11 — 25	1																																																																											
26 — 50	2																																																																											
>50	Add 1 per 50																																																																											
N/A	N/A																																																																											
Washbasins																																																																												
Design Occupancy	Number																																																																											
1 — 30	2																																																																											
> 30	Add 1 per 15																																																																											
Urinals																																																																												
N/A	N/A																																																																											
User Group	Closet Pans																																																																											
	Design Occupancy	Number																																																																										
Class 9b — early childhood centres																																																																												
Children	1 — 30	2																																																																										
	> 30	Add 1 per 15																																																																										
					<p>1x Accessible sanitary facilities has been provided and is compliant for Class 3, 5, 6 and 9 employees.</p> <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 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>																																																																							

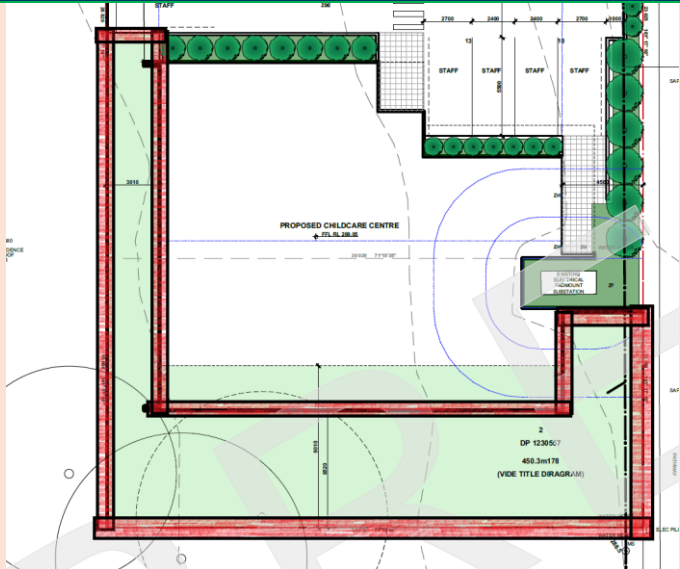
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(e) Adequate means of disposal of sanitary towels must be provided in sanitary facilities for use by females.
F2.4 Facilities for People with Disabilities					Refer to Section D3
F2.5 Construction of Sanitary Compartments		X			<p>The 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>Other than in an early childhood centre, sanitary compartments must have:</p> <p>(iii) Doors and partitions that separate adjacent compartments; and</p> <p>(iv) the door to a fully enclosed sanitary compartment must open outwards, or slide, or be removable from outside of the compartment, unless there is a clear space of at least 1.2m between the closet pan within the compartment and the doorway.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F2.6 Interpretation: Urinals and washbasins				X	<p>Informational clause relevant to urinal and washbasin design.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F2.7 Microbial Control Note NSW F2.7 (Clause Deleted)			X		N/A Clause Deleted in NSW.
F2.8 Waste Management					Applies to Class 9a health care buildings.
F2.9 Accessible adult change facilities			X		Not Applicable
Part F3 Room Sizes					
F3.1 Height of Rooms and other spaces				X	<p>The ceiling height must be not less than—</p> <p>in a Class 9b building—</p> <p>(i) an assembly building or part that accommodates not more than 100 persons — 2.4 m; and</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(ii) an assembly building or part that accommodates more than 100 persons — 2.7 m;</p> <p>(iii) the number of persons accommodated <u>must be</u> calculated according to D1.13; and</p> <p>In any building—</p> <ul style="list-style-type: none"> ➤ a bathroom, shower room, sanitary compartment, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like — 2.1 m; and ➤ a commercial kitchen & required accessible change room facility — 2.4 m; and ➤ above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like.
Part F4 Light & Ventilation					
F4.1 Provision of natural light				X	<p>Natural lighting must be provided to:</p> <ul style="list-style-type: none"> ➤ Class 9b buildings – to all general-purpose classrooms in primary and secondary schools and all playrooms or the like for the use of children in an early childhood centre. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F4.2 Methods and extent of natural lighting		X			<p>The sills of 50% of windows in children's rooms must be located not more than 500 mm above the floor level. One (1x) window in Playroom 3 is to have a sill height not more than 500mm from the floor level.</p>  <p>PLAYROOM 3 (3-5 YR OLDS) (21 OCCUPANTS) 5030 X 7390 68.30 m² UNINCUMBERED REQUIRED 68.25m²</p> <p>OUTDOOR TELE BIN AREA</p> <p>Required natural lighting must be provided by—</p> <p>(i) windows, excluding roof lights, that—</p> <p>(A) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 10% of the floor area of the room; and</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(B) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or</p> <p>(ii) roof lights, that—</p> <p>(A) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 3% of the floor area of the room; and</p> <p>(B) are open to the sky; or</p> <p>(iii) a proportional combination of windows and roof lights required by (i) and (ii).</p> <p>(b) In a Class 9 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 not be less than a horizontal distance from that boundary or wall that is the greater of—</p> <p>(i) generally — 1 m; and</p> <p>(iii) 50% of the square root of the exterior height of the wall in which the window is located, measured in metres from its sill.</p> <p>(d) In a Class 9b early childhood centre, the sills of 50% of windows in children's rooms must be located not more than 500 mm above the floor level.</p>
F4.3 Natural light borrowed from adjoining room			X		Not Applicable
F4.4 Artificial lighting				X	<p>Informational clause relevant to the provision of artificial lighting in accordance with AS/NZS 1680.0-2009 to specific building areas.</p> <p>If natural light of a standard equivalent to that required by F4.2 is not available, and the periods of occupation or use of the room or space will create undue hazard to occupants seeking egress in an emergency, in—Class 9 buildings — to all rooms that are frequently occupied, all spaces required to be accessible, all corridors, lobbies, internal stairways, other circulation spaces and paths of egress.</p> <p>Electrical Design Certification must be incorporated into the construction certificate specification</p>
F4.5 Ventilation of Rooms				X	<p>All rooms to be provided with Clause F4.6 compliant natural ventilation OR a mechanical ventilation or air-conditioning system complying with AS 1668.2-2012.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
F4.6 Natural Ventilation				X	<p>(a) Natural ventilation provided in accordance with F4.5(a) must consist of permanent openings, windows, doors or other devices which can be opened—</p> <p>(i) with ventilating area not less than 5% of the floor area of the room required to be ventilated; and</p> <p>(ii) open to—</p> <p>(A) a suitably sized court, or space open to the sky; or</p> <p>(B) an open verandah, carport, or the like; or</p> <p>(C) an adjoining room in accordance with F4.7.</p> <p>(b) The requirements of (a)(i) do not apply to a Class 8 electricity network substation.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
F4.7 Ventilation borrowed from adjoining room			X		<p>Natural ventilation to a room may come through a window, opening, ventilating door or other device from an adjoining room (including an enclosed verandah) if both rooms are within the same sole-occupancy unit or the enclosed verandah is common property, and—</p> <p>(b) in a 9 building—</p> <p>(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</p> <p>(ii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 10% of the combined floor areas of both rooms; and</p> <p>(c) the ventilating areas specified in (a) and (b) may be reduced as appropriate if direct natural ventilation is provided from another source.</p>
F4.8 Restriction on location of sanitary compartments			X		<p>Rooms containing closet pans or urinals must not open directly into kitchen / pantry areas, public dining areas, Class 3 dormitory areas, public assembly areas (excluding early childhood centres, primary schools and open spectator stands) and a workplace normally occupied by more than one person.</p>
F4.9 Airlocks	X				<p>Informational clause relevant to the provision of airlocks and the like to separate rooms prohibited under Clause F4.8 from opening directly into another room.</p>
F1.11 Carparks			X		Not applicable

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
F4.12 Kitchen local exhaust				X	Informational clause relevant to the provision of a kitchen exhaust hood complying with AS/NZS 1668.1-2015 and AS 1668.2-2012 for commercial kitchens. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Part F5 Sound Transmission					
F5.1 Application of Part			X		The provisions of this Part apply to Class 2, 3 and 9c buildings only.
F5.2 Determination of airborne sound insulation ratings			X		Not Applicable
F5.3 Determination of impact sound insulation ratings			X		Not Applicable
F5.4 Sound Insulation of floors between units			X		Not Applicable
F5.5 Sound insulation of walls between units			X		Not Applicable
F5.6 Sound insulation rating of services			X		Not Applicable
F5.7 Sound isolation of pumps			X		Not Applicable
SECTION G ANCILLIARY PROVISIONS					
Part G1 Minor Structures and Components					
G1.3 Outdoor play areas		X			The outdoor play space must be enclosed on all sides with a barrier which complies with AS 1926.1-2012.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>For the purposes of (a), AS 1926.1 is applied as if there is a swimming pool located outside the outdoor play space, so that the barrier restricts children from exiting the premises without the knowledge of staff in the centre.</p> <p>(c)The requirements of (a) do not apply to a wall, including doors and windows, which form part of the Class 9b early childhood centre.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>


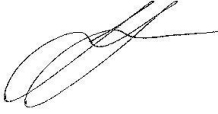
7.0 CONCLUSION

This report provides a Building Code of Australia (BCA) 2019 assessment of Childcare Centre, to be located at Lots 1 & 2, DP1230557, No. 2-6 Chalker Street, THIRLMERE.

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

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

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

<p>Report written by</p>  <p>Fiona Chammoun Accredited Certifier</p> <p>Accreditation No. BPB 2034 DipBS, PgCBS, PgDBS Member Association of Accredited Certifiers (AAC) Member Australian Institute of Building Surveyors (AIBS)</p>	<p>Reviewed by</p>  <p><u>Trenton Jones</u> Director AED Grad Dip Build Surv (UWS) Accredited Certifier / Principal Certifying Authority (Building) – Grade A1 (Unrestricted)</p>
--	--

8.0 ATTACHMENT A - INSPECTION & MAINTENANCE

8.1 Fire Safety Measures

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

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

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

8.2 Good Housekeeping

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

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

9.0 ATTACHMENT B – FIRE-RESISTING CONSTRUCTION

3.1 Fire-resistance of building elements

1. Scope

This Specification contains requirements for the fire-resisting construction of building elements.

2. General Requirements

2.1 Exposure to fire-source features

- (a) A part of a building element is exposed to a fire-source feature if any of the horizontal straight lines between that part and the fire-source feature, or vertical projection of the feature, is not obstructed by another part of the building that—
- (i) has an FRL of not less than 30/—/—; and
 - (ii) is neither transparent nor translucent.
- (b) A part of a building element is not exposed to a fire-source feature if the fire-source feature is—
- (i) an external wall of another building that stands on the allotment and the part concerned is more than 15 m above the highest part of that external wall; or
 - (ii) a side or rear boundary of the allotment and the part concerned is below the level of the finished ground at every relevant part of the boundary concerned.
- (c) If various distances apply for different parts of a building element—
- (i) the entire element must have the FRL applicable to that part having the least distance between itself and the relevant fire-source feature; or
 - (ii) each part of the element must have the FRL applicable according to its individual distance from the relevant fire-source feature, but this provision does not override or permit any exemption from Clause 2.2.

2.2 Fire protection for a support of another part

- (a) Where a part of a building required to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part, subject to (b), must—
- (i) have an FRL not less than that required by other provisions of this Specification; and
 - (ii) if located within the same fire compartment as the part it supports have an FRL in respect of structural adequacy the greater of that required—
 - (A) for the supporting part itself; and
 - (B) for the part it supports; and
 - (iii) be non-combustible—
 - (A) if required by other provisions of this Specification; or
 - (B) if the part it supports is required to be non-combustible.
- (b) The following building elements need not comply with (a)(ii) and (a)(iii)(B):
- (i) An element providing lateral support to an external wall complying with Clause 5.1(b) or C1.11.
 - (ii) An element providing support within a carpark and complying with Clause 3.9, 4.2 or 5.2.
 - (iii) A roof providing lateral support in a building—
 - (A) of Type A construction if it complies with Clause 3.5(a), (b) or (d); and
 - (B) of Type B and C construction.
 - (iv) A column providing lateral support to a wall where the column complies with Clause 2.5(a) and (b).
 - (v) An element providing lateral support to a fire wall or fire-resisting wall, provided the wall is supported

on both sides and failure of the element on one side does not affect the fire performance of the wall.

2.3 Lintels

A lintel must have the FRL required for the part of the building in which it is situated, unless it does not contribute to the support of a fire door, fire window or fire shutter, and—

- (a) it spans an opening in—
 - (i) a wall of a building containing only one storey; or
 - (ii) a non-loadbearing wall of a Class 2 or 3 building; or
- (b) it spans an opening in masonry which is not more than 150 mm thick and—
 - (i) not more than 3 m wide if the masonry is non-loadbearing; or
 - (ii) not more than 1.8 m wide if the masonry is loadbearing and part of a solid wall or one of the leaves of a cavity wall.

2.4 Method of attachment not to reduce the fire-resistance of building elements

The method of attaching or installing a finish, lining, ancillary element or service installation to the building element must not reduce the fire-resistance of that element to below that required.

2.5 General concessions

(a) Steel columns —A steel column, other than one in a fire wall or common wall, need not have an FRL in a building that contains—

- (i) only 1 storey; or
- (ii) 2 storeys in some of its parts and 1 storey only in its remaining parts if the sum of the floor areas of the upper storeys of its 2 storey parts does not exceed the lesser of—
 - (A) 1/8 of the sum of the floor areas of the 1 storey parts; or
 - (B) in the case of a building to which one of the maximum floor areas specified in Table C2.2 is applicable — 1/10 of that area; or
 - (C) in the case of a building to which two or more of the maximum floor areas specified in Table C2.2 is applicable — 1/10 of the lesser of those areas.

(b) Timber columns —A timber column may be used in a single storey building if—

- (i) in a fire wall or common wall the column has an FRL not less than that listed in the appropriate Table 3, 4 or 5; and
- (ii) in any other case where the column is required to have an FRL in accordance with Table 3, 4 or 5, it has an FRL of not less than 30/–/–.

(c) Structures on roofs — A non-combustible structure situated on a roof need not comply with the other provisions of this Specification if it only contains—

- (i) lift motor equipment; or
- (ii) one or more of the following:
 - (A) Hot water or other water tanks.
 - (B) Ventilating ductwork, ventilating fans and their motors.
 - (C) Air-conditioning chillers.
 - (D) Window cleaning equipment.
 - (E) Other service units that are non-combustible and do not contain flammable or combustible liquids or gases.

(d) Curtain walls and panel walls —A requirement for an external wall to have an FRL does not apply to a

curtain wall or panel wall which is of non-combustible construction and fully protected by automatic external wall-wetting sprinklers.

(e) * * * * *

(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) it does not form part of the only path of travel to a required exit from the building; and

(ii) in Type A construction—

(A) it is situated not more than 2 storeys above the lowest storey providing direct egress to a road or open space; and

(B) any supporting columns are of non-combustible construction.

2.6 Mezzanine floors: Concession

(a) This Clause does not apply to a Class 9b building that is a spectator stand or audience viewing area accommodating more than 100 persons as calculated according to D1.13.

(b) A mezzanine and its supports need not have an FRL or be non-combustible provided—

(i) the total floor area of all the mezzanines in the same room does not exceed 1/3 of the floor area of the room or 200 m², whichever is the lesser; and

(ii) the FRL of each wall and column that supports any other part of the building within 6 m of the mezzanine is increased by the amount listed in Table 2.6.

Table 2.6 Increased FRLs — Construction surrounding mezzanines

Table 2.6 Increased FRLs — Construction surrounding mezzanines

Level otherwise <i>required</i> for any FRL criterion (mins)	Increase in level to not less than (mins):
30	60
60	90
90	120
120	180
180	240

Note to Table 2.6: The increase in level applies to each FRL criterion (*structural adequacy*, *integrity* or *insulation*) relevant to the building element concerned.

2.7 Enclosure of shafts

Shafts required to have an FRL must be enclosed at the top and bottom by construction having an FRL not less than that required for the walls of a non-loadbearing shaft in the same building, 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.

2.8 Carparks in Class 2 and 3 buildings

(a) If a Class 2 building contains not more than 4 storeys of which—

(i) one storey is Class 7 used solely for the purpose of parking motor vehicles or for some other purpose that is ancillary to a Class 2; and

(ii) the remaining storeys are of Class 2, the carpark storey is regarded as Class 2 only for the purpose of determining the relevant fire-resisting requirements of this Specification.

(b) If a Class 3 building or a building of Class 2 and 3 contains not more than 3 storeys of which—

(i) one storey is Class 7 used solely for the purpose of parking motor vehicles or for some other purpose that is ancillary to the other storeys; and

(ii) the remaining storeys are of Class 2 or 3,

the carpark storey is regarded as Class 2 or 3 only for the purpose of determining the relevant fire-resisting

10.0 ATTACHMENT B – REQUIREMENTS TYPE C CONSTRUCTION

5.1 Fire-resistance of building elements

In a building required to be of Type C construction—

(a) a building element listed in Table 5 and any beam or column incorporated in it, must have an FRL not less than that listed in the Table for the particular Class of building concerned; and

(b) an external wall that is required by Table 5 to have an FRL need only be tested from the outside to satisfy the requirement; and

(c) a fire wall or an internal wall bounding a sole-occupancy unit or separating adjoining units must comply with Specification C1.8 if it is of lightweight construction and is required to have an FRL; and

(d) in a Class 2 or 3 building, an internal wall which is required by Table 5 to have an FRL must extend—

(i) to the underside of the floor next above if that floor has an FRL of at least 30/30/30 or a fire-protective covering on the underside of the floor; or

(ii) to the underside of a ceiling having a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or

(iii) to the underside of the roof covering if it is non-combustible, and except for roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not be crossed by timber or other combustible building

elements; or

(iv) 450 mm above the roof covering if it is combustible; and

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

(i) have an FRL of at least 30/30/30; or

(ii) have a fire-protective covering on the underside of the floor including beams incorporated in it and around the column, if the floor or column is combustible or of metal; and

(f) in a Class 9c building a floor above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, and any column supporting the floor, must—

(i) have an FRL of at least 30/30/30; or

(ii) have a fire-protective covering on the underside of the floor including beams incorporated in it and around the column, if the floor or column is combustible or of metal.

Table 5 TYPE C 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
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any <i>fire-source feature</i> to which it is exposed is—				
Less than 1.5 m	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90
1.5 to less than 3 m	—/—/—	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
3 m or more	—/—/—	—/—/—	—/—/—	—/—/—
EXTERNAL COLUMN not incorporated in an <i>external wall</i> , where the distance from any <i>fire-source feature</i> to which it is exposed is—				
Less than 1.5 m	90/—/—	90/—/—	90/—/—	90/—/—
1.5 to less than 3 m	—/—/—	60/—/—	60/—/—	60/—/—
3 m or more	—/—/—	—/—/—	—/—/—	—/—/—
COMMON WALLS and FIRE WALLS—	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90

Table 5 TYPE C CONSTRUCTION: FRL OF BUILDING ELEMENTS — continued

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
INTERNAL WALLS—				
Bounding <i>public corridors</i> , public lobbies and the like—	60/ 60/ 60	—/—/—	—/—/—	—/—/—
Between or bounding <i>sole-occupancy units</i> —	60/ 60/ 60	—/—/—	—/—/—	—/—/—
Bounding a stair if <i>required</i> to be rated—	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
ROOFS	—/—/—	—/—/—	—/—/—	—/—/—

5.2 Carparks

(a) Notwithstanding Clause 5.1, a carpark may comply with Table 5.2 if it is an open-deck carpark or is protected with a sprinkler system complying with Specification E1.5 and is—

- (i) a separate building; or
- (ii) a part of a building, and if occupying only part of a storey, is separated from the remaining part by a fire wall.

(b) For the purposes of this Clause, a carpark—

(i) includes—

(A) an administration area associated with the functioning of the carpark; and

(B) where the carpark is sprinklered, is associated with a Class 2 or 3 building and provides carparking for separate sole-occupancy units, each carparking area with an area not greater than 10% of its floor area for purposes ancillary to the sole-occupancy units; but

(ii) excludes—

(A) except for (b)(i), any area of another classification, or other part of a Class 7 building not used for carparking; and

(B) a building or part of a building specifically intended for the parking of trucks, buses, vans and the like.

Table 5.2 REQUIREMENTS FOR CARPARKS

Building element	FRL (not less than) <i>Structural adequacy/Integrity/Insulation</i> ESA/M (not greater than)
Wall	
(a) <i>external wall</i>	
(i) less than 1.5 m from a <i>fire-source feature</i> to which it is exposed:	
<i>Loadbearing</i>	60/60/60
<i>Non-loadbearing</i>	–/60/60
(ii) 1.5 m or more from a <i>fire-source feature</i> to which it is exposed	–/–/–
(b) <i>internal wall</i>	–/–/–
(c) <i>fire wall</i>	
(i) from the direction used as a <i>carpark</i>	60/60/60
(ii) from the direction not used as a <i>carpark</i>	90/90/90
Column	
(a) steel column less than 1.5 m from a <i>fire-source feature</i>	60/–/– or 26 m ² /tonne
(b) any other column less than 1.5 m from a <i>fire-source feature</i>	60/–/–
(c) any other column not covered by (a) or (b)	–/–/–
Beam	
(a) less than 1.5 m from a <i>fire-source feature</i>	
(i) steel floor beam in continuous contact with a concrete floor slab	60/–/– or 30 m ² /tonne
(ii) any other beam	60/–/–
(b) 1.5 m or more from a <i>fire-source feature</i>	–/–/–
Roof, floor slab and vehicle ramp	–/–/–
Note: ESA/M means the ratio of exposed surface area to mass per unit length.	