

BUILDING CODE OF AUSTRALIA COMPLIANCE REPORT

Proposed Gym Development

54 West Esplanade, Manly

Date 9 March, 2021 **Prepared for** F45 Training

Reference No. 21033B – R1.1



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Revision	Date	Status
R1.0	8 March, 2021	Draft
R1.1	9 March, 2021	Final

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2 EXECUTIVE SUMMARY

2.1 General Summary

Al Consultancy has been engaged by F45 Training to carry out a Building Code of Australia compliance review of the proposed change of use and fit out as a gym proposed at 54 West Esplanade, Manly.

In accordance with the client's instructions, we have completed this report with the principal objective of establishing the extent to which the proposal achieves compliance with the Building Code of Australia 2019, Amendment 1, Volume 1 (BCA) including any NSW variations. Within the report we provide recommendations as to the works required to achieve the specified outcomes of this legislation.

2.2 Matters Identified / Recommendations

The following table provides a list of Deemed-To-Satisfy compliance departures with the proposed design:

	Recommended Deemed-To-Satisfy Compliance Solutions			
Item No.	BCA Clause	Comment		
1	C1.10	Any new floor, wall and ceiling linings are required to comply with Fire Hazard Properties. Particular attention is drawn to the rubberised floor coverings		
2	C3.15, Spec C3.15	Where the new plumbing pipes for the bathrooms are required to penetrate the slab into a storey below, they are required to be fire protected.		
3	E1.5, Spec E1.5	The existing sprinkler system is required to be modified based on the revised layout complying with AS2118.1.		
4	E2.2	An existing automatic smoke detection and alarm system (if installed in the tenancy) is required to be modified based on the revised layout complying with BCA Spec E2.2a and AS1670.1.		
5	E2.2	An existing smoke control system (if installed in the tenancy) is required to be modified based on the revised layout complying with BCA Spec E2.2 and AS1668.1.		
6	NSW E2.2b	Any air-handling system serving the tenancy/building (other than non-ducted individual room units with a capacity not more than 1000 L/S) must automatically shut down on activation of the building smoke detection system.		
7	E4.2, E4.4	The existing emergency lighting is required to be modified based on the revised layout in accordance with AS2293.1.		
8	E4.5, E4.6, E4.8	Exit signage is required to be modified based on the revised layout in accordance with AS2293.1		

2.3 Design Certifications

The following table provides a consolidated list of BCA compliance matters that are required to be addressed by design certifications and/or specifications to be issued by the relevant architectural, services and engineering consultants:



Relevant Discipline	Compliance Requirements
Project Architect	 All service penetrations through fire rated elements will be protected with fire seals tested to achieve the required FRL in accordance with AS4072.1 and AS1530.4-2015 in accordance with BCA Spec C3.15.
	 The finished surface materials will achieve a slip resistance classification when tested to AS4586-2013.
	• Fire door signage will be provided to all doors entering/ exiting the fire isolated exits in the building to comply with Clause D2.23 of BCA 2019 Amendment 1.
	 Water proofing membranes for external above ground use will comply with AS4654 Parts 1 and 2.
	 Glazed assemblies to comply with AS2047 and AS1288.
	 Bathrooms and/ or laundries will be provided with floor wastes per Clause F1.11 of BCA 2019, Amendment 1.
Structural Engineer	The existing components of the building to be retained are structurally adequate to support the new loads imposed and core holes required to be made to the slab for services.+
Electrical Consultant	 Any modifications required for a smoke detection and alarm system are required to be in accordance with Table E2.2a, and Specification E2.2a of BCA 2019, Amendment 1 and AS1670.1.
	 Modifications required to the existing emergency lighting within the development is to be in accordance with Clause E4.2, E4.4 of BCA 2019, Amendment 1 and AS2293.1.
	Modifications required to the existing exit signage within the development is to be in accordance with Clause E4.5, E4.7, and E4.8 of BCA 2019, Amendment 1 and AS2293.1.
Mechanical Consultant	Any air-handling system serving the tenancy (other than non-ducted individual room units with a capacity not more than 1000 L/S) will automatically shut-down on activation of smoke detectors installed in accordance with NSW Table E2.2b, Spec E2.2a of BCA 2019, Amendment 1.
	Enclosed areas of the building will be provided with compliant mechanical ventilation systems that accord with AS1668.2-2012 per Clause F4.5 of BCA 2019, Amendment 1.

2.4 Compliance Statement

It is deemed from the assessments carried out within this report that the proposed development is capable of achieving compliance with the relevant requirements of the National Construction Code 2019, Amendment 1, Volume 1 – Building Code of Australia Class 2 to 9 buildings ("BCA") subject to the recommendations/ works identified being accommodated into the finalised design documentation.



3 INTRODUCTION

3.1 General

This document represents the statutory compliance assessment and report for the change of use and tenancy fit out in the existing building located at 54 West Esplanade, Manly.

This report has been completed with the principal objective of establishing the extent to which the proposal achieves compliance with the relevant statutory requirements of the Environmental Planning and Assessment Regulation 2000 ("the Reg") and in particular the Building Code of Australia 2019 Amendment 1, Volume 1 (BCA) including any NSW variations. Within the report we provide recommendations as to the works required to achieve the specified outcomes of this legislation.

Detailed commentary with regard to specific compliance departures identified is provided in the assessment tables under Section 5.0 of this report.

We note that the Consent Authority is able to consider and require upgrading of the existing building elements under the relevant Clauses of 'the Reg'. The extent of upgrading that may be required (if at all) is at the discretion of Council.

3.2 Report Basis

This report has been prepared on the basis of the following:

Architectural plans prepared by Baxter & Jacobson Architects as follows:

Title	Sheet No.	Rev	Date
WC / Shower Plan	CDC - 01	В	18/12/20
Glazing	CDC - 02	Α	18/12/20
Bathroom Elevations	CDC - 03	Α	18/12/20
Reflected Ceiling Plan	CDC - 04	А	18/12/20
Finishes Plan	CDC - 05	Α	18/12/20

- Annual Fire Safety Statement prepared by Mike Hearn, dated 5 February, 2021.
- National Construction Code Series 2019, Amendment 1, Building Code of Australia for Class 2 to 9
 Buildings, published by the Australian Building Codes Board (ABCB).
- The Guide to the National Construction Code Series 2019, Amendment 1, Building Code of Australia or Class 2 to 9 Buildings, published by the Australian Building Codes Board (ABCB).

3.3 Purpose of the Report

The purpose of this report is to:

- Identify the relevant Deemed-to-Satisfy Provisions of the Building Code of Australia 2019
 Amendment 1, Volume 1 (BCA) in relation Clauses C, D1, D2 and E and provide any non-compliances with the relevant Clauses for the proposed development; and
- Provide a schedule of fire safety measures for the proposed development.

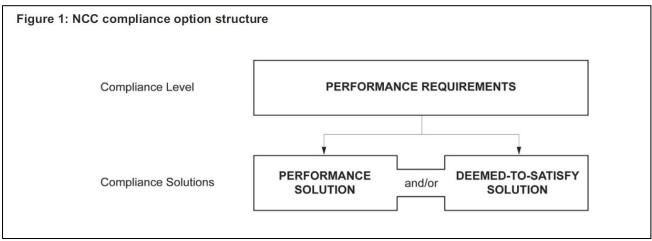
Section A2.1 of the Building Code of Australia 2019 Amendment 1, Volume 1 states that the Performance Requirements can only be satisfied by a:

- (a) Performance Solution; or
- (b) Deemed-to-Satisfy Solution; or
- (c) A combination of (a) and (b).

The following is noted:

- the term Performance Solution was formerly known as Alternative Solution
- The terms Performance Solution and Deemed-to-Satisfy Solution were formerly used under the term Building Solution.





3.4 Building Code of Australia

This report is based on the Deemed-to-Satisfy Provisions of the Building Code of Australia 2019 Amendment 1, Volume 1, and the NSW variations where applicable.

3.5 Limitations

This report is strictly limited to a statutory compliance Review of the project listed in the Executive Summary. This Report cannot be applied to any other project or building design as the assessments are specific for this project only.

The statutory compliance assessment and report specifically excludes the following:

- Determining compliance with the BCA for matters other than addressed with in this report or addressing any matters outside the scope or limitations of the BCA.
- The operations of any of the installed (or to be installed) fire services.
- Protection of Property other than required by the Deemed-to-Satisfy provisions of the BCA, unless specifically referenced in the report (i.e. for Heritage purposes).
- Fires caused by arson, other than as a single source of fire initiation, or terrorist attacks.
- Emergencies other than for fires and fire related evacuations.
- This report has been prepared for the exclusive use of the client referred to on the cover sheet of this report. We do not warrant or accept liability for the reliance upon or use of this report by any other party.
- The report <u>considers matters of a significant nature only</u> and should not be considered exhaustive.
- The report does not consider structural adequacy of the building.
- Any service provider requirements are outside the scope of this report (e.g. Sydney Water, Telstra, etc)

3.6 Assumptions

The assumptions of this report are as follows:

- This report provides a Statutory Compliance assessment to confirm compliance of proposed development with the relevant Performance Requirements of the BCA.
- The assessment and subsequent recommendation(s) provided by this report is based on the design documentation provided for assessment and as listed in Section 3.2. Any future alteration, enlargement or addition will require re-assessment of the revised design documentation.
- The building/s will be subject to ongoing annual maintenance as required by the AFSS.



3.7 Relevant stakeholders

The relevant stakeholders for this project are as listed in the table below.

Role	Organisation
Client	F45 Training
Consent Authority	TBC
Principal Certifying Authority	TBC
BCA Consultant	Paul Prestidge
Access Consultant	TBC



4 BUILDING ASSESSMENT DATA

4.1 Description of Development

The development, subject to this report, is located at 54 West Esplanade, Manly.

The development consists of a change of use and tenancy fit out in the existing building.

4.2 BCA Assessment Information

This section incorporates the access related provisions contained in the BCA. A summary of the compliance status of the architectural design is subsequently provided relevant to each clause.

Alongside each clause heading; compliance shall be indicated by using one (or more) of the following compliance categories –

Characteristic	Description
Building Classification	9b
Rise in Storeys	Unchanged
Levels Contained	Unchanged
Type of Construction	Type A

BCA Assessment/Interpretation Notes:

- **Rise in Storeys** means the greatest number of *storeys* calculated in accordance with C1.2 of the BCA.
- **Storey** means a space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but not—
 - (a) a space that contains only—
 - (i) a lift shaft, stairway or meter room; or
 - (ii) a bathroom, shower room, laundry, water closet, or other sanitary compartment; or
 - (iii) accommodation intended for not more than 3 vehicles; or
 - (iv) a combination of the above; or
 - (b) a mezzanine.

4.3 Fire Sources Features

Summary table for the building setbacks.

Fire Source Feature	Setback
Front (Southern) Allotment Boundary	Unchanged (West Esplanade)
Side (Eastern) Allotment Boundary	Unchanged (Belgrave Street)
Side (Western) Allotment Boundary	Unchanged (Eustace Street)
Rear (Northern) Allotment Boundary	Unchanged (Gilbert Street)

4.4 Maximum Size of Fire Compartments

Summary table for the size of fire compartments for Type A construction.

Classification	Compartment Areas		
5, 9b or 9c	Max floor area	8 000 m ²	
	Max volume	48 000 m ³	
6, 7, 8 or 9a (except for patient care areas)	Max floor area	5 000 m ²	
	Max volume	30 000 m ³	



5 BCA Assessment

The following presents our assessment of the proposed development against the relevant Deemed-To-Satisfy requirements of the BCA in the context of the legislative considerations that are required of a Consent Authority (as outlined above.

The following acronyms are used throughout the assessment tables to provide an indication of the compliance status against each of the Deemed-To-Satisfy requirements.

Category	Description
Complies	Indicates that Deemed-to-Satisfy design compliance is achieved.
Capable	Typically issues that can be readily accommodated into the CC/CDC Design documentation by way of minor plan notation or verification of compliance in design certifications and/or specifications issued by the relevant architectural, services and engineering consultants
Does not comply	Indicates that a Deemed-to-Satisfy compliance departure/s is noted. Resolution options are provided.
Not applicable	Not applicable or not directly relevant.
Design Detail	Compliance commentary is provided. Such should not be considered deficiencies but matters for consideration by the design team / assessment authority at relevant / nominated stages of design.
For Info	General informational commentary.
Performance Solution	The opportunity exists to develop a Performance Solution to resolve the identified compliance departure.

Interpretation Note(s) -

- i. Readily moveable furniture has been treated as indicative. The person/s responsible for furnishing the building (parts) should ensure their furnishing layout/s do not cause AS 1428.1 circulation deficiencies.
- ii. Slip-resistant floor surface/s BCA 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.

Section C1 - FIRE RESISTANCE

BCA Clause	Description	Status	Comments
C1.1	Type of Construction	For Note Only	All building elements to achieve the fire resistance levels of Type A Construction as outlined in Specification C1.1 (Refer Appendix A). No reduction proposed to the existing elements.
Spec C1.1	Fire Ratings	Capable	The existing concrete floors and masonry internal and external walls of the building are considered typical of construction that is expected to achieve the required fire ratings.
			Its noted that the required fire ratings for the previous restaurant use being class 6, is higher than that required for a Class 9.



BCA Clause	Description	Status	Comments
C1.2	Calculation of rise in storeys	For Note Only	
C1.3	Buildings of multiple classification	Complies	All parts of the building are required to be of Type A construction.
C1.4	Mixed Types of Construction	Complies	All parts of the building are required to be of Type A construction.
C1.5	Two Storey Class 2, 3 & 9c	Not Applicable	
C1.6	Class 4 Parts of buildings	Not Applicable	
C1.7	Open spectator stands and indoor sports stadiums	Not Applicable	
C1.8	Lightweight Construction	For Note Only	
Spec C1.8	Structural tests for Lightweight	For Note Only	
C1.9	Non-combustible building elements	Capable	 (a) In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: (i) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation. (ii) The flooring and floor framing of lift pits. (iii) Non-loadbearing internal walls where they are required to be fire-resisting. (b) A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible construction in— (i) a building required to be of Type A construction; and (ii) a building required to be of Type B construction, subject to C2.10, in—(A) a Class 2, 3 or 9 building; and (B) a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys. (c) A loadbearing internal wall and a loadbearing fire wall, including those that are part of



			CONSULTANCY
BCA Clause	Description	Status	Comments
			a loadbearing shaft, must comply with Specification C1.1. (d) The requirements of (a) and (b) do not apply to the following: (i) Gaskets. (ii) Caulking. (iii) Sealants. (iv) Termite management systems. (v) Glass, including laminated glass. (vi) Thermal breaks associated with glazing systems. (vii) Damp-proof courses. (e) The following materials may be used wherever a noncombustible material is required: (i) Plasterboard. (ii) Perforated gypsum lath with a normal paper finish. (iii) Fibrous-plaster sheet. (iv) Fibre-reinforced cement sheeting. (v) Pre-finished metal sheeting having a combustible surface finish not exceeding 1 mm thickness and where the Spread-of-Flame Index of the product is not greater than 0. (vi) Sarking-type materials that do not exceed 1 mm in thickness and have a Flammability Index not greater than5. (vii) Bonded laminated materials where— (A)each lamina, including any core, is noncombustible; and (B)each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2 mm; and (C)the Spread-of-Flame Index and the Smoke-Developed Index of the bonded laminated material as whole do



BCA Clause	Description	Status	Comments
			not exceed 0 and 3 respectively.
			Comment: Details to be provided with the application for CC/CDC for any modification proposed to be made to the external walls.
C1.10	Fire Hazard Properties	Capable	Any new floor, wall and ceiling linings are capable of compliance.
			* <u>Note</u> rubberised floor coverings are to comply with the fire hazard properties.
			Comment: Details to be provided with the application for CC/CDC.
Spec C1.10	Fire Hazard Properties	For Note Only	As above.
C1.11	Performance of external walls in fire (Concrete tilt-up panels)	Not Applicable	
C1.13	Fire-protected Timber Const.	Not Applicable	
Spec C1.13	Cavity Barriers – Timber Const.	Not Applicable	
C1.14	Ancillary elements	Capable	An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is one of the following: (a) An ancillary element that is non-combustible. (b) A gutter, downpipe or other plumbing fixture or fitting. (c) A flashing. (d) A grate or grille not more than 2 m2 in area associated with a building service. (e) An electrical switch, socket-outlet, cover plate or the like. (f) A light fitting. (g) A required sign. (h) A sign other than one provided under (a) or (g) that— (i) achieves a group number of 1 or 2; and (ii) does not extend beyond one storey; and (iii) does not extend beyond one fire compartment; and (iv) is separated vertically from other signs permitted under (h) by at least 2 storeys.



BCA Clause	Description	Status	Comments
			 (i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that— (i) meets the relevant requirements of Table 4 of Specification C1.10 as for an internal element; and (ii) serves a storey— (A) at ground level; or (B) immediately above a storey at ground level; and (iii) does not serve an exit, where it would render the exits unusable in a fire. (j) A part of a security, intercom or announcement system. (k) Wiring. (l) A paint, lacquer or a similar finish. (m) A gasket, caulking, sealant or adhesive directly associated with (a) to (k).
			Comment: Details to be provided with the application for CC/CDC.

Part C2 - COMPARTMENTATION AND SEPARATION

BCA Clause	Description	Status	Comments
C2.2	General Floor Area & Volume Limitations	Complies	No change is proposed to the existing building.
C2.3	Large Isolated Buildings	Not Applicable	
C2.4	Requirements for Open Space and Vehicular Access	Not Applicable	
C2.5	Class 9a & 9c Buildings	Not Applicable	
Spec C2.5	Smoke-proof walls in health-care and residential care buildings	Not Applicable	
C2.6	Vertical separation of openings in external walls (Spandrels)	For Note Only	No change is proposed to the existing building.
C2.7	Separation by fire walls	Not Applicable	No change is proposed to the existing building.
C2.8	Separation of classifications in the same storey	Not Applicable	No change is proposed to the existing building.



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BCA Clause	Description	Status	Comments
C2.9	Separation of classifications in different storeys	Not Applicable	No change is proposed to the existing building.
C2.10	Separation of lift shafts	Not Applicable	No change is proposed to the existing building.
C2.11	Stairways and lifts in one shaft	Not Applicable	No change is proposed to the existing building.
C2.12	one shaft Separation of Equipment	Applicable Not Applicable	 (a) Equipment other than that described in (b) and (c) must be separated from the remainder of the building with construction complying with (d), if that equipment comprises— (i) lift motors and lift control panels; or (ii) emergency generators used to sustain emergency equipment operating in the emergency mode; or (iii) central smoke control plant; or (iv) boilers; or (v) a battery or batteries installed in the building that have a voltage exceeding 24 volts and a capacity exceeding 10 ampere hours. (b) Equipment need not be separated in accordance with (a) if the equipment comprises— (i) smoke control exhaust fans located in the air stream which are constructed for high temperature operation in accordance with Specification E2.2b; or (ii) stair pressurising equipment installed in compliance with the relevant provisions of AS/NZS 1668.1; or (iii) a lift installation without a machine-room; or (iv) equipment otherwise adequately separated from the remainder of the building. (c) Separation of on-site fire pumps must comply with the requirements of AS 2419.1. (d) Separating construction must have— (i) except as provided by (ii)— (A) an FRL as required by
			Specification C1.1, but not less than 120/120/120; and



BCA Clause	Description	Status	Comments
			(B) any doorway protected with a self-closing fire door having an FRL of not less than –/120/30; or
			(ii) when separating a lift shaft and lift motor room, an FRL not less than 120/–/–.
C2.13	Electricity Supply System	Not Applicable	A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must— (i) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and (ii) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than -/120/30.
C2.14	Public corridors in Class 2 and 3 buildings	Not Applicable	No change is proposed to the existing building.

Part C3 - PROTECTION OF OPENINGS

BCA Clause	Description	Status	Comments
C3.2	Protection of openings in external walls	Not Applicable	No change is proposed to the existing building.
C3.3	Separation of external walls and associated openings in different fire compartments	Complies	No change is proposed to the existing building.
C3.4	Acceptable methods of protection	For Note Only	No change is proposed to the existing building.
Spec C3.4	Fire doors, smoke doors, fire windows and shutters	For Note Only	No change is proposed to the existing building.
C3.5	Doors in Fire Walls	Not Applicable	
C3.6	Sliding Fire Doors	Not Applicable	
C3.7	Protection of doorways in horizontal exits	Not Applicable	
C3.8	Openings in Fire Isolated Exits	Not Applicable	No change is proposed to the existing building.
C3.9	Service Penetrations in Fire Isolated Exits	Not Applicable	No change is proposed to the existing building.
C3.10	Openings in Fire Isolated Lift Shafts	Not Applicable	



BCA Clause	Description	Status	Comments
C3.11	Bounding construction: Class 2 and 3 buildings and Class 4 parts	Not Applicable	
C3.12	Openings in Floors & Ceilings	Capable	 (a) Where a service passes through— (i) a floor that is required to have an FRL with respect to integrity and insulation; or (ii) a ceiling required to have a resistance to the incipient spread of fire, the service must be installed in accordance with (b). (b) A service must be protected— (i) in a building of Type A construction, by a shaft complying with Specification C1.1; or (ii) in a building of Type B or C construction, by a shaft that will not reduce the fire performance of the building elements it penetrates; or (iii) in accordance with C3.15. (c) Where a service passes through a floor which is required to be protected by a fire-protective covering, the penetration must not reduce the fire performance of the covering. Comment: All proposed plumbing services passing through the fire rated floor are required to be protected in accordance with C3.15. Details to be provided with the application for CC/CDC.
C3.13	Openings in Shafts	Not Applicable	
C3.15	Openings for Service installations	Capable	Installations through fire rated walls, floors and other elements are to be protected via a method having a FRL relative to the element that they are penetrating. Comment: Where the new plumbing pipes for the bathrooms are required to penetrate the slab into a storey below, they are required to be fire protected. Details to be provided with the application for CC/CDC.
Spec C3.15	Penetration of walls, floors and ceilings by services	Capable	As above



BCA Clause	Description	Status	Comments
C3.16	Construction Joints	Capable	
C3.17	Columns protected with lightweight construction to achieve an FRL	For Note Only	

PART D1 - PROVISION FOR ESCAPE

BCA Clause	Description	Status	Comments
D1.2	Number of Exits Required	Complies	 (a) All buildings — Every building must have at least one exit from each storey. (b) Class 2 to 8 buildings — In addition to any horizontal exit, not less than 2 exits must be provided from the following: (i) Each storey if the building has an effective height of more than 25m. (ii) A Class 2 or 3 building subject to C1.5. (d) Class 9 buildings — In addition to any horizontal exit, not less than 2 exits must be provided from the following: (i) Each storey if the building has a rise in storeys of more than 6 or an effective height of more than 25 m. (ii) Any storey which includes a patient care area in a Class 9a health-care building. (iii) Any storey that contains sleeping areas in a Class 9c building. (iv) Each storey in a Class 9b building used as an early childhood centre. (v) Each storey in a primary or secondary school with a rise in storeys of 2 or more. (vi) Any storey or mezzanine that accommodates more than 50 persons, calculated under D1.13. Comment: Two exits are provided.
D1.3	When fire-isolated stairways and ramps are required	Not Applicable	
D1.4	Exit travel distances	Complies	Class 5, 6, 7, 8 or 9 buildings — Subject to (d), (e) and (f)—



Description	Status	Comments
		 (i) no point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40 m; and (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. Comment: Two exits are required, the
		location of the front and side exit doors complies.
Distance between alternative exits	Complies	Exits that are required as alternative means of egress must be— (a) distributed as uniformly as practicable within or around the storey served and in positions where unobstructed access to at least 2 exits is readily available from all points on the floor including lift lobby areas; and (b) not less than 9 m apart; and (c) not more than— (i) in a Class 2 or 3 building — 45 m apart; or (ii) in a Class 9a health-care building, if such required exit serves a patient care area — 45 m apart; or (iii) in all other cases — 60 m apart; and (d) located so that alternative paths of travel do not converge such that
Dimensions of exits and paths of travel to exits	Capable	they become less than 6 m apart. In a required exit or path of travel to an exit— (a) the unobstructed height throughout
		 (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 (b) the unobstructed width of each exit or path of travel to an exit, except for doorways, must be not less than— (i) 1 m; or (ii) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or
	Distance between alternative exits Dimensions of exits and	Distance between alternative exits Complies Dimensions of exits and Capable



DO 4 OI			
BCA Clause	Description	Status	Comments
BCA Clause	Description	Status	(iii) in a public corridor in a Class 9c aged care building, notwithstanding (c) and (d)— (A) 1.5 m; and (B) 1.8 m for the full width of the doorway, providing access into a sole-occupancy unit or communal bathroom; and (c) if the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width, except for doorways, must be not less than— (i) 1 m plus 250 mm for each 25 persons (or part) in excess of 100; or (ii) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or ward area; and (d) if the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width, except for doorways, must be increased to— (i) 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or (ii) in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200; and (e) in an open spectator stand which accommodates more than 2000 persons, the aggregate unobstructed width, except for
			doorways, must be increased to 17 m plus a width (in metres) equal to the number in excess of 2000 divided by 600; and
D1.7	Travel via Fire-Isolated Exits	Not Applicable	
D1.8	External Stairways or ramps in lieu of fire-isolated exits	Not Applicable	



BCA Clause	Description	Status	Comments
D1.9	Travel by non-fire- isolated stairways or ramps	Not Applicable	
D1.10	Discharge from Exits	Complies	 (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. (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— (i) the minimum width of the required exit; or (ii) 1 m, whichever is the greater. (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— (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 (ii) except if the exit is from a Class 9a building, a stairway complying with the Deemed-to-Satisfy Provisions of the BCA. (d) The discharge point of alternative exits must be located as far apart as practical. (e) In a Class 9b building which is an open spectator stand that accommodates more than 500 persons, a required stairway or required ramp must not discharge to the ground in front of the stand. (f) In a Class 9b building used as an entertainment venue, at least half of the required number of exits from each storey or mezzanine, and at least half of the aggregate width of such exits must discharge otherwise than through the main entrance, or the area immediately adjacent to the main entrance of the building. (g) The number of persons accommodated must be calculated according to D1.13.



BCA Clause	Description	Status	Comments
D1.11	Horizontal Exits	Not Applicable	
D1.12	Non-required stairs, ramps or escalators	Not Applicable	There a no non-required stairways proposed.
D1.13	Number of persons accommodated	For Note Only	The client has advised that the maximum occupant numbers 29 (27 participants and 2 staff)
D1.14	Measurement of distances	For Note Only	
D1.15	Method of measurement	For Note Only	
D1.16	Plant rooms, lift machine rooms and electricity network substations: concession	Not Applicable	No such rooms proposed.
D1.17	Access to Lift Pits	Not Applicable	
D1.18	Egress from early childhood centres	Not Applicable	

PART D2 - CONSTRUCTION OF EXITS

BCA Clause	Description	Status	Comments
D2.2	Fire Isolated Stairs & Ramps	Not Applicable	
D2.3	Non-Fire Isolated Stairs & Ramps	Not Applicable	
D2.4	Rising and descending stairs	Not Applicable	
D2.5	Open access ramps and balconies	Not Applicable	
D2.6	Smoke lobbies	Not Applicable	
D2.7	Installations in paths of travel	Complies	 (a) Access to service shafts and services other than to fire-fighting or detection equipment as permitted in the Deemed-to-Satisfy Provisions of Section E, must not be provided from a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp. (b) An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like, must not be located in any part of a required exit or any corridor, hallway,



			CONSULTANCY
BCA Clause	Description	Status	Comments
			lobby or the like leading to a required exit. (c) Gas or other fuel services must not be installed in a required exit. (d) Services or equipment comprising— (i) electricity meters, distribution boards or ducts; or (ii) central telecommunications distribution boards or equipment; or (iii) electrical motors or other motors serving equipment in the building, may be installed in— (iv) a required exit, except for fire-isolated exits specified in (a); or (v) in any corridor, hallway, lobby or the like leading to a required exit, if the services or equipment are enclosed by non-combustible construction or a fire-protective covering with doorways or openings suitably sealed against smoke spreading from the enclosure. (e) Electrical wiring may be installed in a fire-isolated exit if the wiring is associated with— (i) a lighting, detection, or pressurisation system serving the exit; or (ii) a security, surveillance or management system serving the exit; or (iii) an intercommunication system or an audible or visual alarm system in accordance with D2.22; or (iv) the monitoring of hydrant or sprinkler isolating valves. Comment: Electrical and Telecoms equipment have not been shown within corridors and hallways and the like that facilitate egress.
D2.8	Enclosure of space under stairs and ramps	Not Applicable	
D2.9	Widths of required stairs and ramps	For Note Only	
D2.10	Pedestrian Ramps	Not Applicable	



BCA Clause	Description	Status	Comments
D2.11	Fire-isolated Passageways	Not Applicable	
D2.12	Roof as Open Space	Not Applicable	
D2.13	Goings & Risers	Not Applicable	
D2.14	Landings	Not Applicable	
D2.15	Thresholds	Not Applicable	
D2.16	Barriers to Prevent Falls	Not Applicable	
D2.17	Handrails	Not Applicable	
D2.18	Fixed Platforms, Walkways, Stairways and Ladders	Not Applicable	
D2.19	Doorways and Doors	Capable	A doorway serving as a required exit or forming part of a required exit, or a doorway in a patient care area of a Class 9a health-care building— (i) must not be fitted with a revolving door; and (ii) must not be fitted with a roller shutter or tilt-up door unless— (A) it serves a Class 6, 7 or 8 building or part with a floor area not more than 200 m²; and (B) the doorway is the only required exit from the building or part; and (C) it is held in the open position while the building or part is lawfully occupied; and (iii) must not be fitted with a sliding door unless— (A) it leads directly to a road or open space; and (B) the door is able to be opened manually under a force of not more than 110 N; and (iv) if fitted with a door which is power-operated— (A) it must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and (B) if it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the



BCA Clause	Description	Status	Comments
BCA Clause	Description	310105	activation of a fire or smoke alarm
			anywhere in the fire compartment served by the door.
			Comment: Details to be provided with the application for CC/CDC.
D2.20	Swinging Doors	Complies	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 500 mm on 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 (ii) when fully open, by more than 100 mm on the required width of the required exit, and the measurement of encroachment in each case is to include door handles or other furniture or attachments to the door; and (b) must swing in the direction of egress unless— (i) it serves a building or part with a floor area not more than 200 m², it is the only required exit from the building or 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 (c) must not otherwise impede the path or direction of egress. Comment: The front and side exit doors which serve as the exits for the building are shown as swinging in the direction of egress.
D2.21	Operation of Latch	Capable	(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— (i) a single hand downward action on a single device which is located
			between 900 mm and 1.1 m from the floor and if serving an area



BCA Clause	Description	Status	Comments
BCA Clause	Description	310103	
			required to be accessible by Part D3—
			(A) be such that the hand of a
			person who cannot grip will not
			slip from the handle during the
			operation of the latch; and
			(B) have a clearance between the
			handle and the back plate or door face at the centre grip
			section of the handle of not less
			than 35 mm and not more than
			45 mm; or
			(ii) a single hand pushing action on a
			single device which is located
			between 900 mm and 1.2 m from
			the floor; 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 25 mm wide, proud of the
			surrounding surface and located—
			(aa)not less than 500 mm from
			an internal corner; and
			(bb)for a hinged door, between
			1 m and 2 m from the door
			leaf in any position; and
			(cc)for a sliding door, within 2 m 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—
			(i) serves a vault, strong-room, sanitary
			compartment, or the like; or
			(ii) serves only, or is within—
			(A) a sole-occupancy unit in a
			Class 2 building or a Class 4 part of a building; or
			(B) a sole-occupancy unit in a Class
			3 building (other than an entry
			door to a sole-occupancy unit
			of a boarding house, guest
			house, hostel, lodging house or
			backpacker accommodation); or
			UI



BCA Clause	Description	Status	Comments
			(C) a sole-occupancy unit with a floor area not more than 200 m2 in a Class 5, 6, 7 or 8 building; or (D) a space which is otherwise inaccessible to persons at all times when the door is locked; or (iii) serves— (A) Australian Government Security Zones 4 or 5; or (B) the secure parts of a bank, detention centre, mental health facility, early childhood centre or the like; and it can be immediately unlocked— (C) by operating a fail-safe control switch, not contained within a protective enclosure, to actuate a device to unlock the door; or (D) 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
			(iv) is fitted with a fail-safe device which automatically unlocks the door upon the activation of any sprinkler system (other than a FPAA101D system) complying with Specification E1.5 or smoke, or any other detector system deemed suitable in accordance with AS 1670.1 installed throughout the building, and is readily openable when unlocked;
			(c) The requirements of (a) do not apply in a Class 9b building (other than a school, an early childhood centre or a building used for religious purposes) to a door in a required exit, forming part of a required exit or in the path of travel to a required exit serving a storey or room accommodating more than 100 persons, determined in accordance with D1.13, in which case it must be readily openable— (i) without a key from the side that faces a person seeking egress; and





BCA Clause	Description	Status	Comments
			located between 900 mm and 1.2 m from the floor.
D2.22	Re-entry from Fire- Isolated Exits	Not Applicable	
D2.23	Signs on Doors	Not Applicable	
D2.24	Protection of Openable Windows	Not Applicable	
D2.25	Timber Stairway: Concession	Not Applicable	

PART E1 - FIRE FIGHTING EQUIPMENT

BCA Clause	Description	Status	Comments
E1.3	Fire Hydrants	Complies	A Fire hydrant coverage is required to be provided complying with AS2419. The existing Fire hydrant system is anticipated to comply.
E1.4	Fire hose reels	Complies	A Fire hose reel coverage is required to be provided complying with AS2441. The existing fire hose reel system is anticipated to comply.
E1.5	Sprinklers	Capable	The existing sprinkler system is required to be modified based on the revised layout complying with AS2118.1.
			Comment: Details to be provided with the application for CC/CDC.
Spec E1.5	Sprinkler systems	Capable	As above
E1.6	Portable fire extinguishers	Capable	A Portable Fire Extinguisher complying with AS2444-2001 is required to be provided.
E1.8	Fire control centres	Not Applicable	
Spec E1.8	Fire control centres	For Note Only	
E1.9	Fire precautions during construction	For Note Only	Whilst the building is under construction there is to be not less than one fire extinguisher provided at all times to each storey.
E1.10	Provision for special hazards	Not Applicable	



PART E2 - SMOKE HAZARD MANAGEMENT

BCA Clause	Description	Status	Comments
E2.2	General Requirements	Capable	An existing automatic smoke detection and alarm system (if installed in the tenancy) is required to be modified based on the revised layout complying with BCA Spec E2.2a and AS1670.1. Comment: Details to be provided with application for CC/CDC. Details to be provided
		Capable	An existing smoke control system (if installed in the tenancy) is required to be modified based on the revised layout complying with BCA Spec E2.2 and AS1668.1.
			Comment: Details to be provided with application for CC/CDC.
		Capable	Any air-handling system serving the tenancy/building (other than non-ducted individual room units with a capacity not more than 1000 L/S) must automatically shut down on activation of the building smoke detection system.
			Comment: Details to be provided with application for CC/CDC.
E2.3	Special Hazards	For Note Only	

PART E3 – LIFT INSTALLATIONS

BCA Clause	Description	Status	Comments
E3.1	Lift Installations	Not Applicable	The development does not include modifications to the existing lifts
Spec E3.1	Lift Installations	Not Applicable	
E3.2	Stretcher Facility	Not Applicable	
E3.3	Emergency Lift	Not Applicable	
E3.4	Warning Signage	Not Applicable	
E3.5	Landings	Not Applicable	
E3.6	Passenger Lifts	Not Applicable	
E3.7	Fire Service Controls	Not Applicable	



E3.8	Aged Care Buildings	Not Applicable	
E3.9	Fire Recall Control Switch	Not Applicable	
E3.10	Lift Car Drive Control Switch	Not Applicable	

PART E4 – VISIBILITY IN AN EMERGENCY, EXIT SIGNS AND WARNING SYSTEMS

BCA Clause	Description	Status	Comments	
E4.2	Emergency lighting requirements	Design Detail	An emergency lighting system must be installed— (a) in every fire-isolated stairway, fire isolated passageway or fire-isolate ramp; and (b) in every storey of a Class 5, 6, 7, 8 of 9 building where the storey has floor area more than 300m²— (i) in every passageway, corridor hallway, or the like, that is part of the path of travel to an exit; and (ii) in any room having a floor are more than 100m² that does not open to a corridor or space the has emergency lighting or to road or open space; and (iii) in any room having a floor are more than 300m²; Comment: The existing emergency lighting is required to be modified base on the revised layout in accordance with AS2293.1. Details to be provided with application for CC/CDC.	
E4.3	Measurement of distance	For Note Only		
E4.4	Design and operation of emergency lighting	Design Detail	Emergency lighting is required to be modified based on the revised layout provided throughout the tennacy in accordance with AS2293.1. Comment: Details to be provided with application for CC/CDC.	
E4.5	Exit signs	Design Detail	An exit sign must be clearly visible to persons approaching the exit, and must be installed on, above or adjacent to each— (a) door providing direct egress from a storey to— (i) an enclosed stairway, passageway or ramp serving as a required exit; and (ii) an external stairway, passageway or ramp serving as a required exit; and	



DCA Clauses	Description	Clarker	Commonto
BCA Clause	Description	Status	Comments
			 (iii) an external access balcony leading to a required exit; and (b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and (c) horizontal exit; and (d) door serving as, or forming part of, a required exit in a storey required to be provided with emergency lighting in accordance with E4.2.
			Comment: Exit signage is required to be modified based on the revised layout in accordance with AS2293.1.
			Details to be provided with application for CC/CDC.
E4.6	Direction signs	Design Detail	Exit signage is required to be modified based on the revised layout in accordance with AS2293.1.
			Comment: Details to be provided with application for CC/CDC.
E4.7	Class 2 and 3 buildings and Class 4 parts: Exemptions	For Note Only	
E4.8	Design and operation of exit signs	Design Detail	Exit signage is required to be modified based on the revised layout in accordance with AS2293.1.
			Comment: Details to be provided with application for CC/CDC.
Spec E4.8	Photoluminescent Exit Signs	For Note Only	
E4.9	Emergency warning and intercom systems	Not Applicable	

PART F1 - DAMP AND WEATHERPROOFING

BCA Clause	Description	Status	Comments		
F1.0	Damp and Weatherproofing – Deemed-to-Satisfy Provisions	Performance Solution	F1.0 Deemed-to-Satisfy Provisions Performance Requirement FP1.4, for the prevention of the penetration of water through external walls, must be complied with. There are no Deemed-to-Satisfy Provisions for this Performance Requirement in respect of external walls.		
			FP1.4 Weatherproofing		
			A roof and external wall (including openings around windows and doors)		



BCA Clause	Description	Status	Comments
DCA Cidose	Description	Sidios	must prevent the penetration of water that could cause— (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements. Limitation: FP1.4 does not apply to— (a) a Class 7 or 8 building where in the particular case there is no necessity for compliance; or (b) a garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes; or (c) an open spectator stand or opendeck carpark.
F1.1	Stormwater drainage	Not Applicable	аеск саграгк.
F1.4	External above ground membranes	Not Applicable	
F1.5	Roof coverings	Not Applicable	
F1.6	Sarking	Not Applicable	
F1.7	Waterproofing of wet areas in buildings	Complies	Water proofing of wet areas is to comply with AS3740-2010.
F1.9	Damp-proofing	Complies	Damp-proof course is to be provided compliant with AS2904.
F1.10	Damp-proofing of Floors on the Ground	Complies	Vapour barrier is to be provided in accordance with AS2870.
F1.11	Provision of Floor Wastes	Capable	Bathrooms to be provided with floor wastes.
F1.12	Subfloor ventilation	Not Applicable	
F1.13	Glazed Assemblies	Complies	Glazed assemblies to comply with AS2047 and AS1288.

PART F2 - SANITARY AND OTHER FACILITIES

BCA Clause	Description	Status	Comments
F2.1	Facilities in residential buildings	Not Applicable	
F2.2	Calculation of number of occupants and facilities	For Note Only	(a)The number of persons accommodated must be calculated according to D1.13 if it cannot be



BCA Clause	Description	Status	Comments
			more accurately determined by other means. (b) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females. (c) 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 (other than a facility provided under F2.9) may be counted once for each sex. (d) For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary products.
F2.3	Facilities in Class 3 to 9 buildings	Does not Comply	 a) Except where permitted by (b), (c), (f), F2.4(a), F2.4(b) and F2.9(b), separate sanitary facilities for males and females must be provided for Class 3, 5, 6, 7, 8 or 9 buildings in accordance with Table F2.3. (b) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex. (c) If the majority of employees are employed, a unisex facility may be provided instead of separate facilities for each sex. (d) Employees and the public may share the same facilities in a Class 6 and 9b building (other than a school or early childhood centre) provided the number of facilities provided is not less than the total number of facilities required for employees plus those required for the public. (e) Adequate means of disposal of sanitary products must be provided in sanitary facilities used by females. (i) Class 9b theatres and sporting venues must be provided with one shower for each participants or part thereof. Comment: The client has advised that the maximum occupant numbers 29 (27 participants and 2 staff). Based on the facilities provided within the tenancy in combination with the facilities in the common area of the building immediately behind the tenancy the



BCA Clause	Description	Status	Comments		
			facilities are in surplus of the design occupancy number.		
		Four showers have been provided, three have not been nominated for gend one is accessible. For the sake calculation purposes two have been assumed female and one male, however these are interchangeable.			
			Based on the shower facilities provided the maximum population for the building is 40.		

Table 3 – Sports Venues or the like

	Close	Pans	Urin	als	Wash	basins
User Group	Осс	No.	Occ	No.	Occ	No.
Male	1-20	1	1-10	0	1-10	1
Partici- pants	>20	Add 1 per 20	>10	Add 1 per 20	>10	Add 1 per 10
Female	1-10	1	N/A	N/A	1-10	1
Partici- pants	>10	Add 1 per 10			>10	Add 1 per 10

Note: In accordance with BCA F2.2(c), when calculating the number of sanitary facilities to be provided under F2.1 and F2.4, a unisex facility required for people with a disability may be counted once for each sex.

Male						
Facilities	Provided Maximum					
	Tenancy					
Closet Pan	1	2	30			
Urinals	1 (WC)	1 (WC)	20			
Washbasin	3 + 1	2 + 1	70			

Note: In accordance with BCA F2.6(a)(iii), when calculating the number of sanitary facilities a closet pan may be used in place of a urinal.



BCA Clause	Description	Status Comments				
			Fer	male		
		Facilities	Prov	ided	Maximum	
			Tenancy	Common		
		Closet Pan	1 + 1	2 + 1	50	
		Urinals	N/A	N/A	N/A	
		Washbasin	3 + 1	2 + 1	70	
		are used pred	ominantly by on the basis of	one sex, sanit equal numb	nless the premises cary facilities must pers of males and	
			To	otal		
		Facilities	Max	E	Equal Number	
		Male	20		20	
		Female	50		20	
		Total 40				
			Sho	wers		
		Facilities	Provide	ed	Maximum	
		Male	1 + 1		20	
		Female	2 + 1		30	
		Total	2	10 (Equal nun	nber)	
F2.4	Accessible sanitary facilities	Not Applicable	Does not fo	•	the scope of this	
F2.5	Construction of sanitary compartments	Complies	 (a) Other than in an early childhood centre, sanitary compartments must have doors and partitions that separate adjacent compartments and extend— (i) from floor level to the ceiling in the case of a unisex facility; or (ii) to a height of not less than 1.5 m above the floor if primary school children are the principal users; or (iii) 1.8 m above the floor in all other cases. (b) The door to a fully enclosed sanitary compartment must— (i) open outwards; or (ii) slide; or 			



BCA Clause	Description	Status	Comments
			(iii) be readily removable from the outside of the sanitary compartment,
			unless there is a clear space of at least 1.2 m, measured in accordance with Figure F2.5, between the closet pan within the sanitary compartment and the doorway.
F2.6	Interpretation: urinals and washbasins	For Note Only	 (a) A urinal may be— (i) an individual stall or wall-hung urinal; or (ii) each 600 mm length of a continuous urinal trough; or (iii) a closet pan used in place of a urinal. (b) A washbasin may be— (i) an individual basin; or (ii) a part of a hand washing trough served by a single water tap.
F2.7	Microbial (legionella) control	Not Applicable	Deleted in NSW
F2.8	Waste management	Complies	
F2.9	Accessible adult change facilities	For Note Only	
Spec F2.9	Accessible adult change facilities	For Note Only	

PART F3 - ROOM SIZES

BCA Clause	Description	Status	Comments
F3.1	Height of rooms	Capable	The height of rooms and other spaces must be not less than—
			(b) in a Class 5, 6, 7 or 8 building— (i) except as allowed in (ii) and (f) — 2.4 m; and
			(ii) a corridor, passageway, or the like— 2.1 m; and
			(d) in a Class 9b building— (i) a school classroom or other assembly building or part that accommodates not more than 100 persons — 2.4 m; and (ii) a theatre, public hall or other assembly building or part that accommodates more than 100
			persons — 2.7 m; and (iii) a corridor— (A)that serves an assembly building or part that accommodates not



BCA Clause	Description	Status	Comments
			more than 100 persons — 2.4 m; or
			(B)that serves an assembly building or part that accommodates more than 100 persons — 2.7 m; and
			(iv)the number of persons accommodated must be calculated according to D1.13; and
			(f) in any building— (i) a bathroom, shower room, sanitary compartment, other than an accessible adult change facility, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like — 2.1 m; and
			 (ii) a commercial kitchen — 2.4 m; and (iii) above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like; and (iv) a required accessible adult change facility — 2.4 m.

PART F4 - LIGHT AND VENTILLATION

BCA Clause	Description	Status	Comments
F4.1	Provision of natural light	Not Applicable	 Natural light must be provided in: (a) Class 2 buildings and Class 4 parts of buildings — to all habitable rooms. (b) Class 3 buildings — to all bedrooms and dormitories. (c) Class 9a and 9c buildings — to all rooms used for sleeping purposes. (d) Class 9b buildings — to all general purpose classrooms in primary or secondary schools and all playrooms or the like for the use of children in an early childhood centre.
F4.2	Methods and extent of natural light	Not Applicable	
F4.3	Natural light borrowed from an adjoining room	Not Applicable	
F4.4	Artificial Lighting	Complies	Artificial lighting is to be provided to comply with AS1680.0-2009
F4.5	Ventilation of Rooms	Capable	A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and



			CONSULTANCY
BCA Clause	Description	Status	Comments
			any other room occupied by a person for any purpose must have— (a) natural ventilation complying with F4.6; or (b) a mechanical ventilation or airconditioning system complying with AS 1668.2 and AS/NZS 3666.1.
			Comment: All enclosed areas of the building are required to be provided with either; complying natural ventilation or a system of mechanical ventilation complying with A\$1668.2-2012. Note: In accordance with NSW E2.2a any air-handling system serving the tenancy/building (other than non-ducted individual room units with a capacity not more than 1000 L/S) must automatically shut down on activation of the building smoke detection system.
F4.6	Natural ventilation	Not Applicable	
F4.7	Ventilation borrowed from an adjoining room	Not Applicable	
F4.8	Restriction on Position of Water Closest and Urinals	Complies	Sanitary compartments must not open directly into— (a) a kitchen or pantry; or (b) a public dining room or restaurant; or (c) a dormitory in a Class 3 building; or (d) a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand); or (e) a workplace normally occupied by more than one person.
F4.9	Airlocks	Complies	If a sanitary compartment is prohibited under F4.8 from opening directly to another room— (a) in a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building— (i) access must be by an airlock, hallway or other room; or (ii) the sanitary compartment must be provided with mechanical exhaust ventilation; and (b) in a Class 5, 6, 7, 8 or 9 building (which is not an early childhood centre, primary school or open spectator stand)— (i) access must be by an airlock, hallway or other room with a floor area of not less than 1.1 m2 and



BCA Clause	Description	Status	Comments
			fitted with self-closing doors at all access doorways; or (ii) the sanitary compartment must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened from view.
F4.11	Carparks	Not Applicable	
F4.12	Kitchen local exhaust ventilation	Not Applicable	

PART F5 – SOUND TRANSMISSION AND INSULATION

BCA Clause	Description	Status	Comments
F5.1	Application of Part	Not Applicable	



6 Conclusion

This report identifies the compliance status of the architectural design with the relevant 'deemed-to-satisfy' (DTS) requirements of the Building Code of Australia 2019, Amendment 1, Volume 1.

The outcome of the report highlights that the current design is capable of compliance with the Deemed-to-Satisfy provisions of the BCA and BCA Performance Requirements subject to the recommendations identified within this report being incorporated into the finalised construction certificate design documentation.

BCA Performance Solutions shall be provided where suggested in Sections 5.0 of this report.



7 Appendix

7.1 Fire Safety Schedule

Fire Safety Measures	Proposed Standard of Performance	
Automatic fire detection and alarm systems (Common area 240v smoke Alarms residential, common area lobbies 1-8 inclusive)	BCA E1.7 & AS1668.1-1991, AS1670.1-1986	
Automatic fire suppression system (Sprinklers)	BCA E1.5, Spec E1.5 & AS2118.1-1982	
Emergency lighting	BCA E4.2, E4.4 and AS/NZS2293.1-1987	
Exit signs	BCA E4.5, E4.6, E4.8 and AS/NZS2293.1-1987	
Fire dampers	BCA C3.12, C3.15 & AS/NZ\$1668.1-1991	
Fire doors	BCA Spec C3.4 & AS1905.1-1990	
Fire hydrant systems	BCA E1.3 & AS2419.1-1988	
Fire seals protecting openings in fire resisting components of the building	BCA C3.12, C3.15 & Spec C3.15 & AS1530.4-2014	
Hose reel system	BCA E1.4 & AS2441-1988	
Mechanical air handling system (Existing)	E2.4, F4.5 & AS/NZS1668.1-1988	
Mechanical air handling system (Auto Shutdown – F45 GYM)	BCA E2.2, Spec E2.2b & AS/NZ\$1668.1-2015	
Paths of Travel, stairways, passageways or ramps	BCA Section D, EP&A Regulation, 2000, Clause 184, 185, 186	
Portable fire extinguishers	BCA E1.6 & AS2444-2001	
Smoke Control Systems	BCAE2.1, E2.4 & A\$1668.1-1991	
Wall wetting sprinkler & drencher system	BCA C3.4 & AS2118.2	
Warning and operational signs	EPA Regulation (reg 138), D2.23 (signs on exit doors), E3.3 (lifts)	



7.2 Glossary of Terms

The Act means the Environmental Planning and Assessment Act 1979 (NSW). All amendments and references to the Act also mean amendments and references to the Regulations.

Accessible means having features to enable use by people with a disability.

Access Code means the Access Code contained in the Premises Standards. The code outlines design requirements for a building to be accessible

Accessway means a continuous accessible path of travel (as defined in AS1428.1) to, into or within a building.

AFSS or Annual Fire Safety Statement has the same meaning as it has in "The Reg".

Affected Part has the same meaning as that in the Premises Standards, being the Principal Public Entrance to a building and access way to new work.

Alternative Solution has the same meaning as Performance Solution.

AS1428.1 means AS1428 'Design for access and mobility' Part 1: 2009; General requirements for access – New building work', unless specified.

AS means Australia Standard

Automatic means designed to operate when activated by a heat, smoke or fire sensing device.

Building means the building or part of the building which is the subject of the Building Works.

BCA if not otherwise specified, means National Construction Code 2019, Amendment 1, Volume 1 Building Code of Australia Class 2 to 9 Buildings.

Certificates mean statutory certificates and non-statutory certificates.

Certifying Authority or CA has the same meaning as it has in The Act.

Change of building use or change of use has the same meaning as it has in The Act.

Circulation Space means a clear unobstructed area to enable persons using mobility aids to manoeuvre.

Combustible means—

(a) applied to a material — combustible as determined by AS 1530.1; and

(b) applied to construction or part of a building — constructed wholly or in part of combustible materials.

Compliant means to the standards specified by the Access Code, BCA or A\$1428.1 *Note: for clarity, works may be specified in this report that may omit reference to 'compliant' or a specific standards. Where this is the case, those works are to be 'compliant' to the extent required by this definition.

Complying Development Certificate or CDC has the same meaning as it has in "The Act".

Consent Authority has the same meaning as it has in "The Act".

Construction Certificate or CC has the same meaning as it has in "The Act".

Deemed to Satisfy Provision or **DTS** has the same meaning as the same term in Volumes 1 & 2 of the National standards deemed to achieve compliance with the BCA or Access Code, as applicable.

DDA means the "Disability Discrimination Act 1992"

Development Consent has the same meaning as it has in **The Act**.

CP BCA, we or us means Code Performance BCA Pty Ltd and its staff.

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

Fabric means the basic building structural elements and components of a building including the roof, ceilings, walls and floors. Fire brigade or FRNSW means Fire and Rescue New South Wales being the statutory authority constituted under an Act of Parliament having as one of its functions, the protection of life and property from fire and other emergencies.

Fire compartment has the same mean as the BCA.

Fire Engineering Brief, **FEB** or **Brief** has the same meaning as the term in the IFEG. It is a summary document of proposed assessment methods and goals for a Performance Solution relating to a fire safety matter.

Fire Engineering Report or **FER** has the same meaning as the term in the IFEG. It is a detailed report of assessment methods, calculations and outcomes of a Performance Solution relating to a fire safety matter.

Fire hazard properties has the same meaning as the BCA. Generally the properties of a material or assembly that indicate how they behave under specific fire test conditions.

Fire-isolated passageway means a corridor, hallway or the like, of fire-resisting construction, which provides egress to or from a fire-isolated stairway or fire-isolated ramp or to a road or open space.

Fire-isolated stairway means a stairway within a fire-resisting shaft and includes the floor and roof or top enclosing structure.

Fire-resistance level (FRL) means the grading periods in minutes determined in accordance with BCA Specification A2.3. *Note: A dash means that there is no requirement for that criterion. For example, 90/–/– means there is no requirement for an FRL for integrity and insulation, and –/–/– means there is no requirement for an FRL.

Fire Safety Certificate means an Interim or Final Fire Safety Certificate within the meaning of The Reg.

Floor Area has the same meaning as the National Construction Code 2016 Volume 1 Building Code of Australia Class 2 to 9 Buildings..

IFEG means the International Fire Engineering Guidelines, 2005.

Insulation, in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in AS 1530.4.

Integrity, in relation to an FRL, means the ability to resist the passage of flames and hot gases specified in AS 1530.4.

Loadbearing means intended to resist vertical forces additional to those due to its own weight.

Non-combustible means—

(a) applied to a material — not deemed combustible as determined by AS 1530.1 — Combustibility Tests for Materials; and



(b) applied to construction or part of a building — constructed wholly of materials that are not deemed combustible.

Occupation Certificate or OC has the same meaning as it has in The Act.

Open space means a space on the allotment, or a roof or similar part of a building adequately protected from fire, open to the sky and connected directly with a public road.

Performance Requirement or PR has the same meaning as the term in Volumes 1 & 2 of the National Construction Code.

Premises Standards means the "Disability (Access to Premises – Buildings) Standards 2010"

Performance Solution has the same meaning as the term in Volumes 1 & 2 of the National Construction Code as in force at the time of application for a CDC or CC including all applicable amendments.

Principal Certifying Authority or PCA is a building practitioner as defined by The Act

Public corridor means an enclosed corridor, hallway or the like which—

- (a) serves as a means of egress from 2 or more sole-occupancy units to a required exit from the storey concerned; or
- (b) is required to be provided as a means of egress from any part of a storey to a required exit.

Building Regulations or Bldg Reg means the Building Regulation 2006(NSW) (as amended) and all applicable amendments.

The Reg means the Environmental Planning and Assessment Regulation 2000 (NSW). All amendments and references to the Regulation.

Resistance to the incipient spread of fire, in relation to a ceiling membrane, means the ability of the membrane to insulate the space between the ceiling and roof, or ceiling and floor above, so as to limit the temperature rise of materials in this space to a level which will not permit the rapid and general spread of fire throughout the space

Rise in storeys means the greatest number of storeys calculated in accordance with BCA Clause

Self-closing, applied to a door, means equipped with a device which returns the door to the fully closed position immediately after each opening. C1.2.

Slip Resistant means a property of a surface having a frictional force-opposing movement of an object across a surface.

Sole-occupancy unit means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier

Storey means a space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but not—

- (a) a space that contains only—
 - (i) a lift shaft, stairway or meter room; or
 - (ii) a bathroom, shower room, laundry, water closet, or other sanitary compartment; or
 - (iii) accommodation intended for not more than 3 vehicles; or
 - (iv) a combination of the above; or
- (b) a mezzanine.

Structural adequacy, in relation to an FRL, means the ability to maintain stability and adequate loadbearing capacity as determined by AS 1530.4.



7.3 Table – FRL of Building Elements – Type A Construction

The following table identifies the Fire ratings that are applicable to the general building structure. It should be noted that these fire ratings do not relate to specific elements requiring fire separation (e.g. main switchboard, separation of fire compartments and the like);

Duilding Element	Class of Building – FRL (in minutes)					
Building Element	Class 2, 3 or 4	5, 7a or 9	6	7b or 8		
EXTERNAL WALL (including any column and other building element incorporated therein) or other external building element, where the distance from any fire-source feature to which it is exposed is						
For loadbearing parts –						
Less than 1.5m	90/90/90	120/120/120	180/180/180	240/240/240		
1.5m to less than 3m	90/60/60	120/90/90	180/180/120	240/240/180		
3m or more	90/60/30	120/60/30	180/120/90	240/180/90		
For non-loadbearing parts –						
Less than 1.5m	-/90/90	-/120/120	-/180/180	-/240/240		
1.5m to less than 3m	-/60/60	-/90/90	-/180/120	-/240/180		
3m or more	-/-/-	-/-/-	-/-/-	-/-/-		
External columns not incorporated in an external wall –						
Loadbearing	90/–/–	120/-/-	180/-/-	240/-/-		
Fire/ common walls	90/90/90	120/120/120	180/180/180	240/240/240		
Internal walls –						
Fire resisting lift and stair shafts						
Loadbearing	90/90/90	120/120/120	180/180/180	240/240/240		
Nonloadbearing	-/90/90	-/120/120	-/180/180	-/240/240		
Bounding public corridors, public	lobbies and the lik	e—				
Loadbearing	90/90/90	120/-/-	180/-/-	240/-/-		
Nonloadbearing	-/60/60	-/-/-	-/-/-	-/-/-		
Between or bounding sole-occup	pancy units—					
Loadbearing	90/90/90	120/-/-	180/-/-	240/-/-		
Nonloadbearing	-/60/60	-/-/-	-/-/-	-/-/-		
Vent, pipe, garbage, and like shafts not used for the discharge of hot products of combustion—						
Loadbearing	90/90/90	120/90/90	180/120/120	240/120/120		
Nonloadbearing	-/90/90	-/90/90	-/120/120	-/120/120		
Other loadbearing internal walls, internal beams, trusses and columns—	90/–/–	120/-/-	180/–/–	240/-/-		
Floors	90/90/90	120/120/120	180/180/180	240/240/240		
Roofs	90/60/30	120/60/30	180/60/30	240/90/60		