

Date: 17 July 2024
Our Ref: P240090

Just Train Partnership
52, 176 South Creek Road,
Cromer NSW 2099
Att: Mr Rueben Enoka

Dear Rueben,

**RE: 52, 176 South Creek Road, Cromer
BCA DESIGN COMPLIANCE ASSESSMENT**

Please find enclosed our BCA Compliance Report prepared in respect of the proposed change of use to a Gymnasium within tenancy 52, situated on the above listed property.

In reviewing the content of this Report, particular attention is drawn to the content of Parts 2, 3 and 4, as: –

- ☐ Part 3 Provides a Key point summary
- ☐ Part 4 summarizes the compliance status of the proposed design in terms of each prescriptive provision of the BCA.

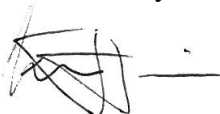
The inclusion of this summary enables an immediate understanding of the compliance status of the proposed design to be obtained.

- ☐ Part 5 contains a detailed analysis of the proposed design, and provides informative commentary & recommendation in respect of each instance of prescriptive non-compliance and area of preliminary only (design) detail, as applicable.

This commentary enables the project team to readily identify and understand the nature and extent of information required within the Construction Certificate application to demonstrate the attainment of BCA compliance.

Should you require any further information, please do not hesitate to contact me on the number provided.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Kieran Tobin', followed by a horizontal line.

Kieran Tobin
Director

BCA DESIGN COMPLIANCE ASSESSMENT

PREPARED FOR

Just Train Partnership

REGARDING

52, 176 South Creek Road, Cromer

Prepared By



REPORT REGISTER

The following report register documents the development and issue of this report and project as undertaken by this office, in accordance with the *Quality Assurance* policy of BCA Vision Pty Ltd.

Our Reference	Issue No.	Remarks	Issue Date
P240090	1	Design Compliance Report	17 July 2024
Author		Kieran Tobin Senior NCC Consultant Registered Building Surveyor - Fair Trading no 0409 Grad Dip Building Surveying UWS	

The format, technical content and intellectual property associated with this report remain the property of BCA Vision Pty Limited, and has been prepared and may only be used, for the development / buildings the subject of this report.

CONTENTS PAGE

1.0	INTRODUCTION.....	1
1.1	General.....	1
1.2	Report Basis.....	1
1.3	Exclusions	1
1.4	Report Purpose.....	2
2.0	MATTERS IDENTIFIED / RECOMMENDATIONS	3
2.1	Compliance Pathways within the BCA	3
2.2	Key Compliance Considerations Identified.....	3
3.0	BUILDING DESCRIPTION	5
3.1	GENERAL	5
3.1	RISE IN STOREYS (CLAUSE C1.2).....	5
2.3	BUILDING CLASSIFICATION (CLAUSE A3.2).....	5
2.4	EFFECTIVE HEIGHT (CLAUSE A1.1).....	5
2.5	TYPE OF CONSTRUCTION (TABLE C1.1).....	5
3.5	GENERAL FLOOR AREA LIMITATIONS (TABLE C2.2).....	6
3.6	FIRE SAFETY UPGRADES TO EXISTING BUILDINGS (EP & A REGS).....	6
3.7	ACCESS TO PREMISES STANDARD	8
3.8	PART B1 - STRUCTURAL PROVISIONS	9
4.0	BCA ASSESSMENT – SUMMARY	11
4.1	GENERAL	11
4.2	SECTION C – FIRE RESISTANCE	11
4.3	SECTION D – ACCESS AND EGRESS	12
4.4	SECTION E – SERVICES AND EQUIPMENT	14
3.1.	SECTION F – HEALTH AND AMENITY	16

5.0	BCA ASSESSMENT – DETAILED ANALYSIS	1
5.1	GENERAL	1
5.2	SECTION D – ACCESS AND EGRESS	1

1.0 INTRODUCTION

1.1 GENERAL

This “BCA Design Compliance Assessment” report has been prepared at the request of Just Train Partnership and relates to the premises located at 52, 176 South Creek Road, Cromer.

The subject tenancy has previously been occupied as an Industrial Warehouse. The tenancy resides within an Industrial complex with a mixture of Building classifications.

The project proposal is for change of Use of the subject premises to facilitate Personal Training (Gymnasium Facilities)

There are no proposed physical works to the premises.

The operational functions within the premises will include 1 on 1 training and in this regard the Occupancy rate will be 1 x trainer and 1 x Participant.

1.2 REPORT BASIS

The content of this report reflects –

- (a) The principles and provisions of BCA 2022 (amendment 1), Parts C, D, E & F4;
- (b) A Site Inspection of the premises by BCA Vision on Wednesday the 17th of July 2024

1.3 EXCLUSIONS

It is conveyed that this report should not be construed to infer that an assessment for compliance with the following has been undertaken –

- (a) Structural and services design documentation;
- (b) General building services;
- (c) The individual requirements of service providers (i.e. Telstra, Water Supply, Energy Australia);
- (d) The individual requirements of the Workcover Authority;
- (e) Disability Discrimination Act (DDA);
- (f) Assessment of any structural elements or geotechnical matters relating to the building;
- (g) Consideration of any fire services operations (including hydraulic, electrical or other systems);
- (h) Consideration of energy or water authority requirements;
- (i) Consideration of Council’s local planning policies;
- (j) Environmental or planning issues;
- (k) Requirements of statutory authorities;
- (l) 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.
- (m) The report considers matters of a significant nature only and should not be considered exhaustive.

1.4 REPORT PURPOSE

The purpose of this report is to identify the extent to which the change of use within the existing building may comply with the relevant prescriptive provisions of BCA 2022, Parts B, C, D, E & F4

Assessment of the proposed design considers each prescriptive BCA provision, and identifies such as either: –

- (a) Being complied with; or
- (b) Not being complied with; or
- (c) Requiring the provision further detail with the future Building Permit or other application or
- (d) Not being relevant to the particular building works proposal.

The status of the design, in terms of these four (4) categories, is summarised within Part 3 of this report.

Where prescriptive non-compliance is identified, suitable recommendations to remedy the non-compliance shall be detailed in Part 4.

In instances where preliminary only detail exists, summary of the information required from the project team for inclusion within future applications (i.e. Construction Certificate) shall also be outlined in Part 4.

2.0 MATTERS IDENTIFIED / RECOMMENDATIONS

2.1 COMPLIANCE PATHWAYS WITHIN THE BCA

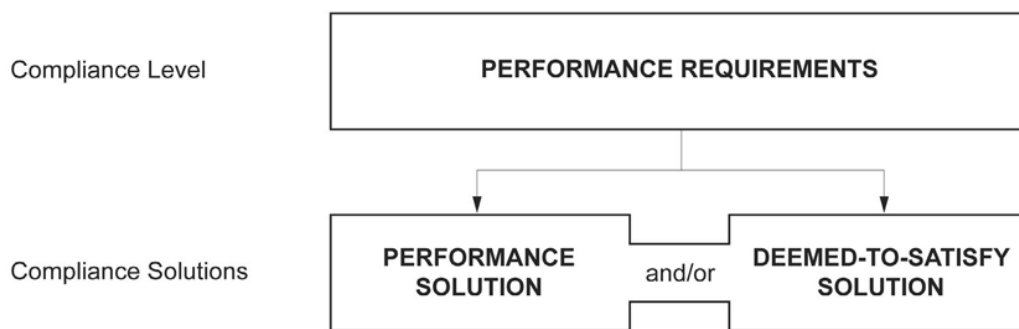
Compliance with the NCC is achieved by complying with—
(1) the Governing Requirements of the NCC; and
(2) the *Performance Requirements*.

A2.1 Compliance with the Performance Requirements

Performance Requirements are satisfied by one of the following, as shown in Figure 1:

- (1) A *Performance Solution*.
- (2) A *Deemed-to-Satisfy Solution*.
- (3) A combination of (1) and (2).

Figure 1: NCC compliance option structure



2.2 KEY COMPLIANCE CONSIDERATIONS IDENTIFIED

The following table provides a list of key compliance issues within the proposed design.

Recommended Deemed-To-Satisfy Compliance Solutions		
	BCA Clause	Comment
1	D3D17 D3D18	Openings in Barriers The balustrade to the stairs has a baluster missing at the mid landing, creating an opening greater than 125mm. We recommend modifying the balustrade in this location to reduce any openings to less than 125mm
2	D2D5	Exit Door Operation We recommend providing a “Hold Open Device: to the ground floor Exit door
3	Part D4	Building Access – The Access to Premises Code The project proposal is for Change of use from Class 7b Warehouse to Class 5 – a Professional Consulting Room

		<p>It is noted that no new works are proposed and in this regard there is no “New Part” as defined within the Access to Premises Standard.</p> <p>In this regard there is no Legislative trigger requiring upgrade of the existing tenancy to achieve compliance with the Access requirements of Part D4 of the BCA or AS 1428.1 - 2009</p>
4	Part E4	<p>Directional Signage</p> <p>We recommend providing an additional 3 Directional signs within the first floor and 1 Directional Sign within the ground floor.</p> <p>The signage is required to comply with AS/NZS 2293.1</p>

3.0 BUILDING DESCRIPTION

3.1 GENERAL

In the context of the Building Code of Australia (BCA), the subject development is described within items 2.2 – 2.6 below.

3.1 RISE IN STOREYS (CLAUSE C1.2)

The building is proposed to have a rise in storeys of 2 (two)

2.3 BUILDING CLASSIFICATION (CLAUSE A3.2)

The subject tenancy incorporates the following classifications:-

CLASS	DESCRIPTION
Class 5	First Floor An Office
Class 9b	Ground Floor An Assembly Building – Gymnasium

2.4 EFFECTIVE HEIGHT (CLAUSE A1.1)

The building has an effective height Not exceeding 12m.

2.5 TYPE OF CONSTRUCTION (TABLE C1.1)

Specification 5 - Type C Construction

TYPE C CONSTRUCTION: FRL OF BUILDING ELEMENTS

Building element	Class of building—FRL: (in minutes)			
	<i>Structural adequacy/ Integrity/ Insulation</i>			
		5, 7a or 9		
EXTERNAL WALL (including any column and other building element incorporated therein) or other external building element, where the distance from any <i>fire-source feature</i> to which it is exposed is—				
Less than 1.5 m		90/ 90/ 90		
1.5 to less than 3 m		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/-/-		
1.5 to less than 3 m		60/-/-		
3 m or more		-/-/-		
COMMON WALLS and FIRE WALLS—		90/ 90/ 90		
INTERNAL WALLS-				
Bounding <i>public corridors</i> , public lobbies and the like—		-/-/-		
Between or bounding <i>sole-occupancy units</i> —		-/-/-		

Building element	Class of building—FRL: (in minutes)		
	<i>Structural adequacy/ Integrity/ Insulation</i>		
	5, 7a or 9		
Bounding a stair if <i>required</i> to be rated—	60/ 60/ 60		
ROOFS	-/-/-		

3.5 GENERAL FLOOR AREA LIMITATIONS (TABLE C2.2)

The Subject Building requires the following maximum fire compartment floor area and volume limits for Construction: –

Table C2.2 – Maximum size of Fire Compartments				
Building Class		Type A	Type B	Type C
5, 9b, 9c	Max Floor area	8000 m ²	5,500 m ²	3000 m²
	Max Volume	48,000 m ³	33,000 m ³	18,000 m³

3.6 FIRE SAFETY UPGRADES TO EXISTING BUILDINGS (EP & A REGS)

Subject to the following maximum fire compartment floor area and volume limits for Construction: –

62 FIRE SAFETY AND OTHER CONSIDERATIONS

Sub clause	Requirement	Comment/Advice
1	This <u>clause</u> applies to a <u>development application</u> for a change of building use for an existing building where the applicant does not seek the rebuilding, alteration, enlargement or extension of a building.	A Change of use is proposed within the ground floor
2	In determining the <u>development application</u> , the consent authority is to take into consideration whether the fire protection and structural capacity of the building will be appropriate to the building's proposed use.	For reference
3	Consent to the change of building use sought by a <u>development application</u> to which this <u>clause</u> applies must not be granted unless the consent authority is satisfied that the building complies (or will, when completed, comply) with such of the Category 1 fire safety provisions as are applicable to the building's proposed use. Note: The obligation to comply with the Category 1 fire safety provisions may require building work to be carried out even though none is proposed or required in relation to the relevant development consent.	For reference

64 CONSENT AUTHORITY MAY REQUIRE BUILDINGS TO BE UPGRADED

Sub clause	Requirement	Comment/Advice
1	This clause applies to a development application for development involving the rebuilding, alteration, enlargement or extension of an existing building where: (a) the proposed building work, together with any other building work completed or authorised within the previous 3 years, represents more than half the total volume of the building, as it was before any such work was commenced, measured over its roof and external walls, or does not apply (b) the measures contained in the building are inadequate: (i) to protect persons using the building, and to facilitate their egress from the building, in the event of fire, or (ii) to restrict the spread of fire from the building to other buildings nearby.	No Works are proposed
2	In determining a development application to which this clause applies, a consent authority is to take into consideration whether it would be appropriate to require the existing building to be brought into total or partial conformity with the <i>Building Code of Australia</i> .	For Reference

Category 1 fire safety provision		
<i>Means the following provisions of the Building Code of Australia</i>		
Performance Ref	Performance Requirement	Compliance Comments
EP1.3	A fire hydrant system must be provided to the degree necessary to facilitate the needs of the <i>fire brigade</i> appropriate to a) Fire-fighting operations; and b) The floor area of the building; and c) The fire hazard	The building is provided with compliant Hydrant coverage
EP1.4	An <i>automatic</i> fire suppression system must be installed to the degree necessary to control the development and spread of fire appropriate to a) The size of the Fire Compartment; and b) The function or use of the building; and c) The Fire Hazard; and d) The Height of the Building	The building does not require an automatic Fire Suppression system
EP1.6	Suitable facilities must be provided to the degree necessary in a building to co-ordinate <i>fire brigade</i> intervention during an emergency appropriate to a) The function or use of the	A Fire Control room is not required within the subject building

	<p>building and</p> <p>b) The Floor area of the building; and</p> <p>c) The height of the building.</p>	
EP2.1	In a building providing sleeping accommodation, occupants must be provided with <u>automatic</u> warning on the detection of smoke so they may evacuate in the event of a fire to a <u>safe place</u> .	The building does Not provide sleeping accommodation
EP2.2	<p>In the event of a fire in a building the conditions in any evacuation route must be maintained for the period of time occupants take to evacuate the part of the building so that</p> <p>i) the temperature will not endanger human life; and</p> <p>ii) the level of visibility will enable the evacuation route to be determined and</p> <p>iii) the level of toxicity will not endanger human life.</p>	For Reference
EP3.2	<p>The period of time occupants take to evacuate referred to in (a) must be appropriate to</p> <p>i) the number, mobility and other characteristics of the occupants; and</p> <p>ii) the function or use of the building; and</p> <p>iii) the travel distance and other characteristics of the building; and</p> <p>iv) the <u>fire load</u>; and</p> <p>v) the potential <u>fire intensity</u>; and</p> <p>vi) the <u>fire hazard</u>; and</p> <p>vii) any active <u>fire safety systems</u> installed in the building; and</p> <p>viii) <u>fire brigade</u> intervention.</p>	For Reference

3.7 ACCESS TO PREMISES STANDARD

1.1 Name of Standards

These Standards are the Disability (Access to Premises — Buildings) Standards 2010.

1.2 Commencement

These Standards commenced on 1 May 2011.

1.3 Objects

The objects of these Standards are:

- (a) to ensure that dignified, equitable, cost-effective and reasonably achievable access to buildings, and facilities and services within buildings, is provided for people with a disability; and
- (b) to give certainty to building certifiers, building developers and building managers that, if access to buildings is provided in accordance with these Standards, the provision of that access, to the extent covered by these Standards, will not be unlawful under the Act.

Excerpt from Disability (Access to Premises Buildings) Standards 2010

Clause (4) A part of a building is a ***new part*** of the building if it is an extension to the building or a modified part of the building about which:

- (a) an application for approval for the building work is submitted, on or after 1 May 2011, to the competent authority in the State or Territory where the building is located; or
- (b) all of the following apply:
 - (i) the building work is carried out for or on behalf of the Crown;
 - (ii) the building work commences on or after 1 May 2011;
 - (iii) no application for approval for the building work is submitted, before 1 May 2011, to the competent authority in the State or Territory where the building is located.

(5) An affected part is:

- (a) the principal pedestrian entrance of an existing building that contains a new part; and
- (b) any part of an existing building, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.

Subsection 2.1(5) - Affected part

The Premises Standards introduce a new concept referred to as the ‘affected part’ of an existing building. The introduction of this defined area reflects the desire to improve general accessibility of existing buildings over time where full upgrades of a building are not taking place.

The requirement for upgrading of the ‘affected part’ of buildings recognises that there is little value in improving access in new parts of existing buildings if people with disability cannot get to those new parts.

Subsection 2.1(5) defines the term ‘affected part’ of a building.

Affected part means the path of travel between (and including) the principal pedestrian entrance of an existing building to the ‘new part’ or modified part of the building. This path of travel must provide a continuous accessible path of travel (see ‘Accessway’ as defined in A1.1 of the Access Code) from the principal pedestrian entrance to the new part or modified part of the building.

Note on extent of ‘affected part’

The definition of ‘affected part’ of a building is limited to the area between (and including) the principal pedestrian entrance and the new work, but does not extend from the entrance to the allotment boundary or any required carparking spaces. It also does not extend to any toilet facilities or other rooms adjacent to the pathway between the principal pedestrian entrance and the area of the new work.

3.8 PART B1 - STRUCTURAL PROVISIONS

Structural Engineers Details prepared by an Appropriately qualified Structural Engineer will be required within the Construction Certificate Documentation.

Confirmation will be required that the design achieves compliance with the following standards (where relevant):-

- AS 1170.0 – 2002 – General Principles
- AS 1170.1 – 2002 – Certification of Barriers to Prevent Falls (Dead and Live Loads)
- AS 1170.2 – 2011 – Wind Loads
- AS 1170.4 – 2007 – Earthquake Actions
- AS 3700 – 2018 – Masonry Structures
- AS 3600 – 2018 – Concrete Structures
- AS 4100 – 1998 – Steel Structures
- AS 4600 – 2018 – Cold Formed Steel Structures
- AS 2519- 2009 – Piling Design and Installation
- AS 1720.1 – 2010 – Design of Timber Structures
- AS/NZS 1664.1 and 1664.2 – 1997 – Aluminium Construction
- AS 2047 – 2014 – Windows and External Glazed Doors in Buildings
- AS 1288 – 2006 – Glass In Buildings Selection and Installation

4.0 BCA ASSESSMENT – SUMMARY

4.1 GENERAL

The tables contained within items 3.2 – 3.5 below summarise the compliance status of the proposed architectural design in terms of each prescriptive provision of the Building Code of Australia.

For those instances of either “prescriptive non-compliance” or “preliminary only detail”, a detailed analysis and commentary is provided within Part 4.

4.2 SECTION C – FIRE RESISTANCE

BCA reference	Complies	Does not comply	Detail Required	Not relevant
C2D1 - Deemed-to-Satisfy Provisions	✓			
C2D2 - Type of construction required	✓			
C2D3 - Calculation of rise in storeys	✓			✓
C2D4 - Buildings of multiple classification				✓
C2D5 - Mixed types of construction				✓
C2D6 - Two storey Class 2, 3 or 9c buildings				✓
C2D7 - Class 4 parts of buildings				✓
C2D8 - Open spectator stands and indoor sports stadiums				✓
C2D9 - Lightweight construction				✓
C2D10 - Non-combustible building elements				✓
C2D11 - Fire hazard properties				✓*
C2D12 - Performance of external walls in fire				✓
C2D13 - Fire-protected timber: Concession				✓
C2D14- Ancillary elements				✓
C2D15-Fixing of bonded laminated cladding panels				✓
C3D3 - General floor area and volume limitations	✓			
C3D4 - Large isolated buildings				✓
C3D5 - Requirements for open spaces and vehicular access				✓
C3D6 - Class 9 buildings				
C3D7 - Vertical separation of openings in external walls				✓
C3D8 - Separation by fire walls				✓
C3D9 - Separation of classifications in the same storey				✓
C3D10 - Separation of classifications in different storeys				✓
C3D11 - Separation of lift shafts				✓
C3D12 - Stairways and lifts in one shaft				✓
C3D13 - Separation of equipment				✓
C3D14 - Electricity supply system				✓
C3D15 - Public corridors in Class 2 and 3 buildings				✓
C4D3 - Protection of openings in external walls	✓			
C4D4- Separation of external walls and associated openings in different fire compartments				✓
C4D5- Acceptable methods of protection				✓
C4D6- Doorways in fire walls				✓
C4D7-Sliding fire doors				✓
C4D8- Protection of doorways in horizontal exits				✓
C4D9- Openings in fire-isolated exits				✓
C4D10- Service penetrations in fire-isolated exits				✓
C4D11- Openings in fire-isolated lift shafts				✓
C4D12- Bounding construction: Class 2 and 3 buildings and Class 4 parts				✓
C4D13- Openings in floors and ceilings for services				✓
C4D14- Openings in shafts				✓
C4D15- Openings for service installations				✓
C4D16- Construction joints				✓
C4D17- Columns protected with lightweight construction to achieve an FRL				✓
✓* = cannot identify compliance from a visual inspection				

4.3 SECTION D – ACCESS AND EGRESS

BCA reference	Complies	Does not comply	Detail Required	Not relevant
D2D3 - Number of exits required	✓			
D2D4 - When fire-isolated stairways and ramps are required				✓
D2D5 - Exit travel distances	✓			
D2D6 - Distance between alternative exits	✓			
D2D7 - Height of exits, paths of travel to exits and doorways	✓			
D2D8 - Width of exits and paths of travel to exits	✓			
D2D9 - Width of doorways in exits or paths of travel to exits	✓			
D2D10 - Exit width not to diminish in direction of travel	✓			
D2D11 - Determination and measurement of exits and paths of travel to exits	✓			
D2D12 - Travel via fire-isolated exits				✓
D2D13 - External stairways or ramps in lieu of fire-isolated exits				✓
D2D14 - Travel by non-fire-isolated stairways or ramps				✓
D2D15 - Discharge from exits	✓			
D2D16 - Horizontal exits				✓
D2D17 - Non-required stairways, ramps or escalators				✓
D2D18 - Number of persons accommodated	✓			
D2D19 - Measurement of distances				✓
D2D20 - Method of measurement				✓
D2D21 - Plant rooms, lift machine rooms and electricity network substations: Concession				✓
D2D22 - Access to lift pits				✓
D2D23 - Egress from primary schools				✓
D3D3 - Fire-isolated stairways and ramps				✓
D3D4 - Non-fire-isolated stairways and ramps				✓
D3D5 - Separation of rising and descending stair flights				✓
D3D6 - Open access ramps and balconies				✓
D3D7 - Smoke lobbies				✓
D3D8 - Installations in exits and paths of travel				✓
D3D9 - Enclosure of space under stairs and ramps				✓
D3D10 - Width of required stairways and ramps				✓
D3D11 - Pedestrian ramps				✓
D3D12 - Fire-isolated passageways				✓
D3D13 - Roof as open space				✓
D3D14 - Goings and risers				✓
D3D15 - Landings				✓
D3D16 - Thresholds				✓
D3D17 - Barriers to prevent falls				✓
D3D18 - Height of barriers				✓
D3D19 - Openings in barriers			✓	
D3D20 - Barrier climbability				✓
D3D21 - Wire barriers				✓
D3D22 - Handrails				✓
D3D23 - Fixed platforms, walkways, stairways and ladders				✓
D3D24 - Doorways and doors				✓
D3D25 - Swinging doors			✓	
D3D26 - Operation of latch	✓			
D3D27 - Re-entry from fire-isolated exits				✓
D3D28 - Signs on doors				✓
D3D29 - Protection of openable windows				✓
D3D30 - Timber stairways: Concession				✓
D4D2 -General building access requirements				✓
D4D3 -Access to buildings				✓
D4D4 -Parts of buildings to be accessible				✓
D4D5 -Exemptions				✓
D4D6 -Accessible carparking				✓
D4D7 -Signage				✓
D4D8 -Hearing augmentation				✓
D4D9 -Tactile indicators				✓

D4D10- Wheelchair seating spaces in Class 9b assembly buildings				✓
D4D11-Swimming pools				✓
D4D12-Ramps				✓
D4D13-Glazing on an accessway				✓

4.4 SECTION E – SERVICES AND EQUIPMENT

BCA reference	Complies	Does not comply	Detail Required	Not relevant
E1D2 - Fire hydrants	✓			
E1D3 -Fire hose reels				✓
E1D4 - Sprinklers				✓
E1D5 - Where sprinklers are required: all classifications				✓
E1D6 - Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings				✓
E1D7 -Where sprinklers are required: Class 3 building used as a residential care building				✓
E1D8 - Where sprinklers are required: Class 6 building				✓
E1D9 - Where sprinklers are required: Class 7a building, other than an open-deck carpark				✓
E1D10 -Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings				✓
E1D11 - Where sprinklers are required: Class 9b buildings				✓
E1D12 - Where sprinklers are required: additional requirements				✓
E1D13 -Where sprinklers are required: occupancies of excessive hazard				✓
E1D14 -Portable fire extinguishers	✓			
E1D15 -Fire control centres				✓
E1D16 -Fire precautions during construction				✓
E1D17 -Provision for special hazards				✓
E2D3 -General requirements				✓
E2D4 -Fire-isolated exits				✓
E2D5 -Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building				✓
E2D6 -Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings				✓
E2D7 -Buildings more than 25 m in effective height: Class 9a buildings				✓
E2D8 -Buildings not more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building				✓
E2D9 -Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings				✓
E2D10 -Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4				✓
E2D11 -Buildings not more than 25 m in effective height: Class 9a and 9c buildings				✓
E2D12 -Class 7a buildings				✓
E2D13 -Basements (other than Class 7a buildings)				✓
E2D14 -Class 6 buildings – in fire compartments more than 2000 m2: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)				✓
E2D15 -Class 6 buildings – in fire compartments more than 2000 m2: Class 6 building (containing an enclosed common walkway or mall)				✓
E2D16 -assembly buildings: nightclubs, discotheques and the like				✓
E2D17 - assembly buildings: exhibition halls				✓
E2D18 - assembly buildings: theatres and public halls				✓
E2D19 -Class 9b – assembly buildings: theatres and public halls (not listed in E2D18) including lecture theatres and cinema/auditorium complexes				✓
E2D20 -Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)				✓
E2D21 -Provision for special hazards				✓
E3D2 - Lift installations				✓
E3D3 - Stretcher facility in lifts				✓
E3D4 - Warning against use of lifts in fire				✓
E3D5 - Emergency lifts				✓
E3D6 -Landings				✓
E3D7 -Passenger lift types and their limitations				✓

E3D8 -Accessible features required for passenger lifts				✓
E3D9 -Fire service controls				
E3D10 -Residential care buildings				
E3D11 -Fire service recall control switch				
E3D12 -Lift car fire service drive control switch				
E4D2 -Emergency lighting requirements				✓
E4D3 -Measurement of distance				✓
E4D4 -Design and operation of emergency lighting				✓
E4D5 -Exit signs				✓
E4D6 -Direction signs			✓	
E4D7 -Class 2 and 3 buildings and Class 4 parts: exemptions				✓
E4D8 -Design and operation of exit signs			✓	
E4D9 -Emergency warning and intercom systems				✓

3.1. SECTION F – HEALTH AND AMENITY

BCA reference	Complies	Does not comply	Detail required	Not relevant
F4D2 - Calculation of number of occupants and facilities	✓			
F4D3 - Facilities in Class 3 to 9 buildings	✓			
F4D4 - Accessible sanitary facilities				✓
F4D5 - Accessible unisex sanitary compartments				✓
F4D6 - Accessible unisex showers				✓
F4D7 - Construction of sanitary compartments				✓
F4D8 - Interpretation: urinals and washbasins				✓
F4D9 - Microbial (legionella) control				✓
F4D10 - Waste management				✓
F4D12 - Accessible adult change facilities				✓

5.0 BCA ASSESSMENT – DETAILED ANALYSIS

5.1 GENERAL

With reference to the “BCA Assessment Summary” contained within Part 3 above, the following detailed analysis and commentary is provided.

This commentary is formulated to enable the design documentation to be further progressed, for the purpose of evidencing the attainment of compliance with the relevant provisions of the BCA.

In our opinion compliance with the Building Code of Australia 2022, Volume 1, can be achieved subject to the implementation of the following details into the Construction documentation.

5.2 SECTION D – ACCESS AND EGRESS

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
D3D19	<p>Openings in barriers</p> <p>(1) Except where allowed by (2), openings in a <i>required</i> barrier must not allow a 125 mm sphere to pass through.</p> <p>(2) In a <i>fire-isolated stairway</i>, <i>fire-isolated ramp</i> or other area used primarily for emergency purposes, openings in a <i>required</i> barrier— (a) must not allow a 300 mm sphere to pass through; or</p> <p>(b) where rails are used— (i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the <i>landing</i>, balcony or the like; and</p> <p>(ii) the opening between rails must not be more than 460 mm.</p> <p>(3) In Class 7 (other than <i>carparks</i>) and Class 8 buildings, openings in a <i>required</i> barrier— (a) must not allow a 300 mm sphere to pass through; or</p> <p>(b) where rails are used— (i) a 150 mm sphere must not be able to pass through the opening</p>	<p>Openings in Barriers</p> <p>The balustrade to the stairs has a baluster missing at the mid landing, creating an opening greater than 125mm.</p> <p>We recommend modifying the balustrade in this location to reduce any openings to less than 125mm</p>

	<p>between the nosing line of the stair treads and the rail or between the rail and the floor of the <i>landing</i>, balcony or the like; and</p> <p>(ii) the opening between the rails must not be more than 460 mm.</p> <p>(4) The requirements of (2) do not apply to external stairways, external ramps, or <i>fire-isolated stairways</i> or <i>fire-isolated ramps</i> serving Class 9b <i>early childhood centres</i>.</p> <p>(5) For a barrier provided under (1), the maximum 125 mm barrier opening for a stairway, such as a non <i>fire-isolated stairway</i>, is measured above the nosing line of the stair treads.</p> <p>(6) Where a <i>required</i> barrier is fixed to the vertical face forming an edge of a <i>landing</i>, balcony, deck, stairway or the like, the opening formed between the barrier and the face must not exceed 40 mm.</p> <p>(7) For the purposes of (6), the opening is measured horizontally from the edge of the trafficable surface to the nearest internal face of the barrier.</p>	
D3D25	<p>Swinging doors [2019: D2.20]</p> <p>(1) 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 stairway, ramp or passageway if it is likely to impede the path of travel of the people already using the exit; and</p> <p>(ii) when fully open, by more than 100 mm on the required width of the required exit; and</p> <p>(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</p>	<p>Exit Door Operation</p> <p>We recommend providing a “Hold Open Device: to the ground floor Exit door</p>

5.3 SECTION E – – SERVICES AND EQUIPMENT

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
E4D6	Direction signs If an <i>exit</i> is not readily apparent to persons occupying or visiting the building then <i>exit</i> signs must be installed in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a <i>required exit</i> .	Directional Signage We recommend providing an additional 3 Directional signs within the first floor and 1 Directional Sign within the ground floor.
E4D8	Design and operation of exit signs Every <i>required exit</i> sign must— (a)comply with— (i)AS/NZS 2293.1; or (ii)for a photoluminescent <i>exit</i> sign, Specification 25; and (b)be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.	The signage is required to comply with AS/NZS 2293.1

Author



Kieran Tobin, Registered Building Surveyor - Fair Trading no 0409, Grad Dip Building Surveying UWS