

Date: 11 June 2025 Our Ref: P250079

Modbod Unit 4/21 Orlando Road Cromer, NSW 2099 Att: Mr Ben Wood

Dear Ben,

RE: Units 1, 2, 3 and 4, 21 Orlando Rd, Cromer BCA COMPLIANCE ASSESSMENT

Please find enclosed our BCA Compliance Report prepared in respect of the proposed use of Units 1, 2, 3 and 4 as an indoor Recreational Facility.

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

Kieran Tobin Director

# **BCA COMPLIANCE ASSESSMENT**

# PREPARED FOR

# **Modbod**

# REGARDING Units 1, 2, 3 and 4, 21 Orlando Rd, 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
P250079	1	Design Compliance Report	11 June 2025
Author		Kieran Tobin Senior NCC Consultant Registered Building Surveyor - Fair T Grad Dip Building Surveying UWS	Frading no 0409

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## 1.0 Introduction

#### 1.1 GENERAL

This "BCA Compliance Assessment" report has been prepared at the request of Modbod, and relates to the premises located at Units 1, 2, 3 and 4, 21 Orlando Rd, Cromer.

The project proposal is for the proposed use of Units 1, 2, 3 and 4 as an indoor Recreational Facility.

Staff Facilities and an additional training room exist within Unit 5.

#### 1.2 REPORT BASIS

The content of this report reflects –

- (a) The principles and provisions of BCA 2022, Amendment 1, Parts B, C, D, E & F4;
- (b) A site inspection of the premises by BCA Vision on Tuesday the 10<sup>th</sup> of June 2025
- (c) Architectural documentation (Sheets 00, 01. 10, 20, 21, 42 and 43) prepared by Renovate Plans
- (d) Certificate of Test Zebra Sports Mat, issued by CSIRO and dated 20/10/22
- (e) Letter of Structural Adequacy issued by Grounded Structures and dated 07/05/25
- (f) Fire Safety Statement prepared by Thomfoolery and dated 18/07/24

#### 1.3 EXCLUSIONS

It is conveyed that this report should not 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, including any;
- (g) Consideration of any fire services <u>operations</u> (including hydraulic, electrical or other systems);
- (h) Assessment of plumbing and drainage installations, including stormwater;
- (i) Assessment of mechanical plant operations, electrical systems or security systems;
- (i) Heritage significance;
- (k) Consideration of energy or water authority requirements;
- (1) Consideration of Council's local planning policies;
- (m) Environmental or planning issues;
- (n) Requirements of statutory authorities;
- (o) Sections G, H, J or I of the BCA are not considered;
- (p) 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 anyother party.

- (q) The report <u>considers matters of a significant nature only</u> and should not be considered exhaustive.
- (r) The report does not consider structural adequacy of the building.

#### 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, Amendment 1, 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—

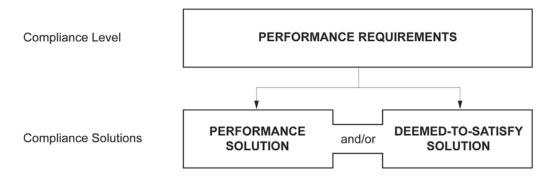
- (1) the Governing Requirements of the NCC; and
- (2) the *Performance Requirements*.

#### **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 BASE BUILDING CONSIDERATIONS IDENTIFIED

Deemed-To	Deemed-To-Satisfy Compliance – Key Considerations				
Item No.	BCA Clause	Comment			
1.	C2D2,	Fire Resistance General			
	Spec 5 C3D8, C3D9, C4D6	All building elements to achieve the fire resistance levels of Type A Construction as outlined in Specification 5 (Refer Clause 3.4 of this report).			
		The Fire Resistance Levels provided by the existing building cannot be determined from a visual inspection of the building and in this regard compliance with Specification 5 cannot be clarified.			
		However it is noted that a Class 9b portion dictating Type A Construction was previously approved and currently exists within the upper levels of this building			
		The subject tenancy would not therefor trigger upgrade within the building in regard to Fire Resistance			

2.	C3D7	Vertical Protection of openings
		The base building is not provided with Vertical Protection of
		Openings however we note that there is no alteration to the building
		previous or proposed.
		A Class 9b portion dictating Type A Construction was previously
		approved and currently exists within the upper levels of this building
		We note that the entire lower ground floor is sprinkler protected.
		In our opinion the subject tenancy has not triggered a requirement for
		Vertical Protection of Openings within this building

# 2.3 KEY COMPLIANCE CONSIDERATIONS IDENTIFIED

Deemed-To	Deemed-To-Satisfy Compliance – Key Considerations				
Item No.	<b>BCA Clause</b>	Comment			
1.	D3D25	Operation of Exit Doors			
		The Exit Doors currently swing inward but are required to be modified to swing outward in the direction of egress.			
2.	Part D4	Building Access The tenancy enjoys a Lessees Concession and in this regard the New Part only is required to comply with the Access requirements The following departures were identified The Mezzanine Levels are not provided with Lift or Ramp access – Access is only available via stairs. The stairs are not compliantly provided with Tactile Ground Surface Indicators at the top and Bottom Landings. The stair hand rail extensions are not compliant with Clause 11 of AS 1428.1  We recommend engaging an Access Consultant with a view to preparing a Performance Report in relation to these issues.			

## 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 C2D3)

The building has a rise in storeys of four (4).

## 3.2 BUILDING CLASSIFICATION (CLAUSE A3.2)

The Building contains the following classifications

Class	Description
7a	A carpark.
7b	A Facility used for storage
8	A Facility used for Manufacturing
9b	An Assembly building – applies to the subject tenancies

#### 3.3 Effective Height

The buildings have an effective height of less than 12m.

# 3.4 Type of Construction (Clause C2D2, Table 5)

**Specification 5 - Type A Construction** 

Table SFC1 TYPE A CONSTRUCTION: FRL OF BUILDING ELEMENTS

Building element	Class of building — FRL: (in minutes)					
	St	Structural adequacy/ Integrity/ Insulation				
	2, 3 or 4 part	5, 7a or 9	6	7b or 8		
EXTERNAL WALL (including any						
other external building element, whe exposed is—	ere the distanc	e from any <i>fire-s</i>	<i>ource feature</i> to v	which it is		
For loadbearing parts—						
less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240		
1.5 to less than 3 m	90/60/60	120/ 90/ 90	180/180/120	240/240/180		
3 m or more	90/60/30	120/60/30	180/120/ 90	240/180/90		
For non- loadbearing parts—						
less than 1.5 m	<b>-/ 90/ 90</b>	-/120/120	-/180/180	-/240/240		
1.5 to less than 3 m	<b>-/</b> 60/ 60	<b>-/ 90/ 90</b>	-/180/120	-/240/180		
3 m or more	_/_/_	_/_/_	_/_/_	_/_/_		
EXTERNAL COLUMN not incorp	orated in an e	xternal wall—				
For loadbearing columns—						
	90/-/-	120/–/–	180//-	240//-		
For non- loadbearing columns—						
	_/_/_	-/-/-	_/_/_	_/_/_		
COMMON WALLS and FIRE WALLS—	90/ 90/ 90	120/120/120	180/180/180	240/240/240		

Building element	Class of building — FRL: (in minutes)					
	Structural adequacy/ Integrity/ Insulation					
	2, 3 or 4 part	5, 7a or 9	6	7b or 8		
INTERNAL WALLS—						
Fire-resisting lift and stair shafts—						
Loadbearing	90/90/90	120/120/120	180/120/120	240/120/120		
Non- loadbearing	<b>-/ 90/ 90</b>	-/120/120	-/120/120	-/120/120		
Bounding public corridors, public lob	bies and the	like—				
Loadbearing	90/90/90	120//-	180//	240/–/–		
Non- loadbearing	<b>-/</b> 60/ 60	-/-/-	_/_/_	_/_/_		
Between or bounding sole-occupancy	units—					
Loadbearing	90/90/90	120//-	180//-	240/–/–		
Non- loadbearing	<b>-/</b> 60/ 60	-/-/-	_/_/_	-/-/-		
Ventilating, pipe, garbage, and like <i>shafts</i> not used for the discharge of hot products of combustion—						
Loadbearing	90/90/90	120/ 90/ 90	180/120/120	240/120/120		
Non- loadbearing	<b>-/ 90/ 90</b>	<b>-/ 90/ 90</b>	-/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		

#### 3.5 GENERAL FLOOR AREA LIMITATIONS (TABLE C3D3)

Note – Not applicable to residential portion

Subject to 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 Max Volume	8000 m <sup>2</sup> 48,000 m <sup>3</sup>	5,500 m <sup>2</sup> 33,000 m <sup>3</sup>	3000 m <sup>2</sup> 18,000 m <sup>3</sup>

#### 3.6 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
- A building in a *flood hazard area* must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas.

#### 3.7 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</u> <u>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 has historically occurred within the premises.
2	In determining the <u>development</u> <u>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

application for development involving the have occur	/Advice
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,	50% of the floor area red

	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.		
,	In determining a development application	For Reference	
,	to which this clause applies, a consent	1 of Reference	
	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		
	Building Code of Australia.		

2

0	Category 1 fire safety provision  Means the following provisions of the Building Code of Australia						
Performance Ref	Performance Requirement	<b>Compliance Comments</b>					
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	The building is provided with compliant coverage There appears to be a Fire Engineered Solution attached to the Fire Hydrant Operation					
EP1.4	c) The fire hazard  An <u>automatic</u> 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 is provided with an automatic Fire Suppression system within the Lower Ground Floor. A suppression system is not required within the subject tenancies					
EP1.6	Suitable facilities must be provided to the degree necessary in a building to coordinate <i>fire brigade</i> intervention during an emergency appropriate to  a) The function or use of the building and  b) The Floor area of the building; and  c) The height of the building.	A Fire Control room is not required within the subject building					
EP2.1	In a building providing sleeping accommodation, occupants must be provided with <i>automatic</i> warning on the detection of smoke so they may evacuate in the event of a fire to a <i>safe place</i> .	The building does Not provide sleeping accommodation					

EP2.2	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  i) the temperature will not endanger human life; and  ii) the level of visibility will enable the evacuation route to be determined and  iii) the level of toxicity will not endanger human life.	For Reference
EP3.2	The period of time occupants take to evacuate referred to in (a) must be appropriate to  i) the number, mobility and other characteristics of the occupants; and  ii) the function or use of the building; and  iii) the travel distance and other characteristics of the building; and  iv) the fire load; and  v) the potential fire intensity; and vi) the fire hazard; and vii) any active fire safety systems installed in the building; and  Viii) fire brigade intervention.	For Reference

#### 3.8 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.

# 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

4.2 SECTION C - FIRE RESISTANCE					
BCA reference	Complies	Does not	Detail	Not relevant	
		comply	Required	relevant	
C2D1 - Deemed-to-Satisfy Provisions	<b>√</b> (*)				
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				<b>√</b>	
C2D10 - Non-combustible building elements				✓	
C2D11 - Fire hazard properties	✓				
C2D12 - Performance of external walls in fire				✓	
C2D13 - Fire-protected timber: Concession				✓	
C2D14- Ancillary elements				<b>√</b>	
C2D15-Fixing of bonded laminated cladding panels				✓	
C3D3 - General floor area and volume limitations				<b>√</b>	
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	, ()			<b>√</b>	
C3D9 - Separation of classifications in the same storey	<b>√</b> (*)			•	
C3D10 - Separation of classifications in the same storeys	<b>√</b> (*)				
C3D11 - Separation of classifications in different storeys  C3D11 - Separation of lift shafts	• ( )			<b>√</b>	
C3D12 - Stairways and lifts in one shaft				· /	
C3D13 - Separation of equipment				· /	
C3D14 - Electricity supply system					
C3D14 - Electricity supply system  C3D15 - Public corridors in Class 2 and 3 buildings				<b>→</b>	
C4D3 - Protection of openings in external walls				<b>→</b>	
C4D4- Separation of external walls and associated openings				-/	
in different fire compartments				•	
C4D5- Acceptable methods of protection				<b>√</b>	
C4D5- Acceptable methods of protection C4D6- Doorways in fire walls				<b>→</b>	
C4D0- Doorways in the wans C4D7-Sliding fire doors				<b>→</b>	
C4D7-Stiding the doors C4D8- Protection of doorways in horizontal exits					
C4D8- Protection of doorways in nonzontal exits  C4D9- Openings in fire-isolated exits				<b>→</b>	
C4D9- Openings in fire-isolated exits  C4D10- Service penetrations in fire-isolated exits					
C4D10- Service penetrations in fire-isolated exits  C4D11- Openings in fire-isolated lift shafts				<b>→</b>	
C4D11- Openings in the isolated fift shalts C4D12- Bounding construction: Class 2 and 3 buildings and					
Class 4 parts				•	
C4D13- Openings in floors and ceilings for services	✓				
C4D13- Openings in Hoors and centings for services  C4D14- Openings in shafts	*			<b>√</b>	
C4D14- Openings in snatts C4D15- Openings for service installations	✓			<b>-</b>	
C4D15- Openings for service installations C4D16- Construction joints	•			<b>✓</b>	
				<b>-</b>	
C4D17- Columns protected with lightweight construction to achieve an FRL				•	
$\checkmark$ (*) = Presumed to Comply – refer to Table 2.2 comments	•				

#### 4.3 SECTION D – ACCESS AND EGRESS

BCA reference	Complies	Does not comply	Detail	Not relevant
		Comply	Required	relevant
D2D3 - Number of exits required	<b>√</b>			
D2D4 - When fire-isolated stairways and ramps are required	<b>√</b>			
D2D5 - Exit travel distances	✓			
D2D6 - Distance between alternative exits				<b>√</b>
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	<b>√</b>			
D2D10 - Exit width not to diminish in direction of travel	✓			
D2D12 - Travel via fire-isolated exits				<b>√</b>
D2D13 - External stairways or ramps in lieu of fire-isolated exits				./
D2D14 - Travel by non-fire-isolated stairways or ramps	<b>✓</b>			<b>V</b>
D2D15 - Discharge from exits D2D16 - Horizontal exits	•			1
D2D10 - Horizontal exits D2D17 - Non-required stairways, ramps or escalators				<i>'</i>
				<b>→</b>
D2D18 - Number of persons accommodated D2D19 - Measurement of distances				<b>✓</b>
D2D19 - Measurement of distances D2D20 - Method of measurement				<b>▼</b>
D2D20 - Method of measurement D2D21 - Plant rooms, lift machine rooms and electricity network				<b>√</b>
substations: Concession				•
D2D22 - Access to lift pits				✓
D2D23 - Egress from primary schools				<u> </u>
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	<b>√</b>			
D3D16 - Thresholds	<b>√</b>			
D3D17 - Barriers to prevent falls	<b>√</b>			
D3D18 - Height of barriers	<b>V</b>			
D3D19 - Openings in barriers	<b>✓</b>			,
D3D20 - Barrier climbability				<b>√</b>
D3D21 - Wire barriers	<b>✓</b>			▼
D3D22 - Handrails D3D23 - Fixed platforms, walkways, stairways and ladders	<b>–</b>			
D3D23 - Fixed platforms, walkways, stairways and ladders D3D24 - Doorways and doors				<b>▼</b>
D3D24 - Doorways and doors D3D25 - Swinging doors		<b>√</b>		•
D3D25 - Swinging doors D3D26 - Operation of latch		<b>*</b>		
D3D27 - Re-entry from fire-isolated exits	<del>'</del>			<b>√</b>
D3D28 - Signs on doors				· ·
D3D29 - Protection of openable windows				✓
D3D30 - Timber stairways: Concession				<b>√</b>
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	FER	Not relevant
E1D2 - Fire hydrants	✓			✓	
E1D3 -Fire hose reels	✓			✓	
E1D4 - Sprinklers				✓	✓
E1D5 - Where sprinklers are required: all classifications					<b>✓</b>
E1D6 - Where sprinklers are required: Class 2 and 3 buildings other					
than residential care buildings			1		
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			1		· ·
an open-deck carpark					
E1D10 -Where sprinklers are required: Class 9a health-care building					<b>√</b>
used as a residential care building, Class 9c buildings					
E1D11 - Where sprinklers are required: Class 9b buildings					✓
E1D12 - Where sprinklers are required: additional requirements			1		✓
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					<b>✓</b>
E2D4 -Fire-isolated exits					<b>✓</b>
E2D5 -Buildings more than 25 m in effective height: Class 2 and 3					<b> </b>
buildings and Class 4 part of a building					
E2D6 -Buildings more than 25 m in effective height: Class 5, 6, 7b, 8					<b>✓</b>
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					<b>/</b>
3 buildings and Class 4 part of a building					
E2D9 -Buildings not more than 25 m in effective height: Class 5, 6,	<b>✓</b>			✓	<b>✓</b>
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					<b>✓</b>
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					<b> </b>
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					<b>✓</b>
E3D4 - Warning against use of lifts in fire					<b>✓</b>
E3D5 - Emergency lifts					<b>✓</b>
E3D6 - Landings					<b>√</b>
E3D7 -Passenger lift types and their limitations					<b>✓</b>

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,Parts C, D, E and F4 can be achieved subject to the implementation of the following details into the Construction documentation.

#### 5.3 SECTION D – ACCESS AND EGRESS

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
D3D25	Swinging doors  (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  (ii)when fully open, by more than 100 mm on the required width of the required exit; and must swing in the direction	Operation of Exit Doors The Exit Doors currently swing inward but are required to be modified to swing outward in the direction of egress.
D4D2	General building access requirements (1)Buildings and parts of buildings must be <i>accessible</i> as <i>required</i> by this clause, unless exempted by D4D5. (2)Access requirements for a Class 1b building are as follows: Dwellings located on one allotment and used for short-term holiday accommodation — in	Building Access The tenancy enjoys a Lessees Concession and in this regard the New Part only is required to comply with the Access requirements

accordance with (a)Table

- (b)A boarding house, bed and breakfast, guest house, hostel or the like, other than those described in (a) to and within— (i)1 bedroom and associated sanitary facilities; and
- (ii)not less than 1 of each type of room or space for use in common by the residents or guests, including a cooking facility, sauna, gymnasium, *swimming pool*, laundry, games room, eating area, or the like; and
- (iii)rooms or spaces for use in common by all residents on a floor to which access by way of a ramp complying with AS 1428.1 or a passenger lift is provided.
- (3)For the purposes of (2)(a), a community or strata-type subdivision or development is considered to be on a single allotment.
- (4) For a Class 2 building, common areas are to be *accessible* as follows: From a pedestrian entrance *required* to be *accessible* to at least 1 floor containing *sole-occupancy units* and to the entrance doorway of each *sole-occupancy unit* located on that level.
- (b)To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, *swimming pool*, common laundry, games room, individual shop, eating area, or the like.
- (c) Where a ramp complying with AS 1428.1 or a passenger lift is installed—(i) to the entrance doorway of each *sole-occupancy unit*; and
- (ii)to and within rooms or spaces for use in common by the residents.
- (d)The requirements of (c) only apply where the space referred to in (c)(i) or (ii) is located on the levels served by the lift or ramp.
- (5)For a Class 3 building, access requirements are as follows: (a)Common areas: (i)From a pedestrian entrance required to be accessible to at least 1 floor containing *sole-occupancy units* and to the entrance doorway of each *sole-occupancy unit* located on that level.
- (ii)a cooking facility, sauna, gymnasium, *swimming pool*, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like.
- (iii) Where a ramp complying with AS 1428.1 or a passenger lift is installed—(A) to the

The following departures were identified The Mezzanine Levels are not provided with Lift or Ramp access – Access is only available via stairs.

The stairs are not compliantly provided with Tactile Ground Surface Indicators at the top and Bottom Landings.

The stair hand rail extensions are not compliant with Clause 11 of AS 1428.1

We recommend engaging an Access Consultant with a view to preparing a Performance Report in relation to these issues. entrance doorway of each sole-occupancy unit; and

- (B)to and within rooms or spaces for use in common by the residents.
- (iv) The requirements of (iii) only apply where the space referred to in (A) and (B) are located on the levels served by the lift or ramp.
- (b) Sole-occupancy units in accordance with Table D4D2b.
- (6)For Class 5, 6, 7b, 8 and 9a buildings, access must be provided to and within all areas normally used by the occupants.
- (7) For a Class 7a building, access must be provided to and within any level containing *accessible* carparking spaces.
- (8) For a Class 9b building, access requirements are as follows: (a) Schools and early childhood centres to and within all areas normally used by the occupants.
- (b)An assembly building, not being a school or early childhood centre—to and within—
- (i)wheelchair seating spaces provided in accordance with D4D10; and
- (ii)all other areas normally used by the occupants, except that access need not be provided to tiers or platforms of seating areas that do not contain wheelchair seating spaces.
- (9) For a Class 9c building, access requirements are as follows: (a) Common areas: (i) From a pedestrian entrance required to be *accessible* to at least 1 floor containing *sole-occupancy units* and to the entrance doorway of each *sole-occupancy unit* located on that level.
- (ii)To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, *swimming pool*, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like.
- (iii)Where a ramp complying with AS 1428.1 or a passenger lift is installed—(A)to the entrance doorway of each *sole-occupancy unit*; and
- (B)to and within rooms or spaces for use in common by the residents.
- (iv)The requirements of (iii) only apply where the space referred to in (A) and (B) are located on the levels served by the lift or ramp.
- (b) Sole-occupancy units in accordance with Table D4D2b.

(10) For a Class 10 building, access requirements are as follows: (a) For a Class 10a non-habitable building located in an *accessible* area intended for use by the public and containing a sanitary facility, change room facility or shelter, to and within—an *accessible* sanitary facility; and

- (ii)a change room facility; and
- (iii)a public shelter or the like.
- (b) For Class 10b *swimming pools*, to and into *swimming pools* with a total perimeter greater than 40 m, associated with a Class 1b, 2, 3, 5, 6, 7, 8 or 9 building that is *required* to be *accessible*, but not *swimming pools* for the exclusive use of occupants of a Class 1b building or a *sole-occupancy unit* in a Class 2 or Class 3 building.

#### D4D3 Access to buildings

- (1)An accessway must be provided to a building required to be accessible— (a)from the main points of a pedestrian entry at the allotment boundary; and
- (b) from another *accessible* building connected by a pedestrian link; and from any *required accessible* carparking space on the allotment.
- (2)In a building *required* to be *accessible*, an *accessway* must be provided through the principal pedestrian entrance, and— (a)through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and
- (b)in a building with a total *floor area* more than 500 m2, a pedestrian entrance which is not *accessible* must not be located more than 50 m from an *accessible* pedestrian entrance, except for pedestrian entrances serving only areas exempted by D4D5.
- (3)Where a pedestrian entrance *required* to be *accessible* has multiple doorways— (a)if the pedestrian entrance consists of not more than 3 doorways— not less than 1 of those doorways must be *accessible*; and
- (b) if a pedestrian entrance consists of more than 3 doorways not less than 50% of those doorways must be *accessible*.
- (4)For the purposes of (3)— (a)an *accessible* pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where— (i)all doorways serve the same part or parts of the building; and

- (ii)the distance between each doorway is not more than the width of the widest doorway at that pedestrian entrance (see Figure D4D3); and
- (b)a doorway is considered to be the clear, unobstructed opening created by the opening of one or more door leaves (see Figure D4D3).
- (5) Where a doorway on an *accessway* has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm in accordance with AS 1428.1.

#### D4D4 Parts of buildings to be accessible

In a building *required* to be *accessible*— (a) every ramp and stairway, except for ramps and stairways in areas exempted by D4D5, must comply with— (i) for a ramp, except a *fire-isolated ramp*, clause 10 of AS 1428.1; and

- (ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and
- (iii) for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and
- (b)every passenger lift must comply with E3D7; and
- (c) accessways must have— (i) passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available; and
- (ii)turning spaces complying with AS 1428.1— within 2 m of the end of *accessways* where it is not possible to continue travelling along the *accessway*; and
- (B)at maximum 20 m intervals along the accessway; and
- (d)an intersection of *accessways* satisfies the spatial requirements for a passing and turning space; and
- (e)a passing space may serve as a turning space; and
- (f)a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a *storey* or level other than the entrance *storey* in a Class 5, 6, 7b or 8 building— (i)containing not more than 3 *storeys*; and
- (ii) with a *floor area* for each *storey*, excluding the entrance *storey*, of not more than 200 m2; and

(g)clause 7.4.1(a) of AS 1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm'; and

(h)the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4 mm and 15 mm respectively.

### D4D7 Signage

(1)In a building *required* to be *accessible*— (a)braille and tactile signage complying with Specification 15 must— (i)incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 and identify each— *occupancy unit* in a Class 3 or Class 9c building; and sanitary facility, except a sanitary facility associated with a bedroom in a Class 1b building or a (A)*sole*-

- (B)space with a hearing augmentation system; and
- (ii)identify each door required by E4D5 to be provided with an exit sign and state—
- (A)"Exit"; and
- (B)"Level"; and
- (C)the floor level number or floor level descriptor, or a combination of the two.
- (b) signage including the international symbol for deafness in accordance with AS 1428.1 must be provided within a room containing a hearing augmentation system identifying—(i) the type of hearing augmentation; and
- (ii)the area covered within the room; and
- (iii)if receivers are being used and where the receivers can be obtained; and
- (c)signage in accordance with AS 1428.1 must be provided for *accessible* unisex sanitary facilities to identify if the facility is suitable for left or right handed use; and
- (d) signage to identify an ambulant *accessible* sanitary facility in accordance with AS 1428.1 must be located on

the door of the facility; and

(e)where a pedestrian entrance is not *accessible*, directional signage incorporating the international symbol of access, in accordance with AS 1428.1, must be provided to direct a person to the location of the nearest *accessible* pedestrian entrance; and

(f)where a bank of sanitary facilities is not provided with an *accessible* unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS 1428.1 must be placed at the location of the sanitary facilities that are not *accessible*, to direct a person to the location of the nearest *accessible* unisex sanitary facility.

(2)In a building that is subject F4D12 and is *required* to be *accessible*, directional signage

(2)In a building that is subject F4D12 and is *required* to be *accessible*, directional signage complying with Specification 15 to direct a person to the location of the nearest *accessible* adult change facility within that building must be provided at the location of each— (a)bank of sanitary facilities; and *accessible* unisex sanitary facility, other than one that incorporates an *accessible* adult change facility.

#### **D4D9**

#### Tactile indicators

(1) For a building *required* to be *accessible*, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching—(a) a stairway, other than a *fire-isolated stairway*; and

(b)an escalator; and a passenger conveyor or moving walk; and

(d)a ramp other than a *fire-isolated ramp*, step ramp, kerb ramp or *swimming pool* ramp; and (e)in the absence of a suitable barrier— (i)an overhead obstruction less than 2 m above floor level, other than a doorway; and

(ii)an *accessway* meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D4D5, if there is no kerb or kerb ramp at that point,

except for areas exempted by D4D5.

(2) Tactile ground surface indicators *required* by (1) must comply with sections 1 and 2 of AS/NZS 1428.4.1.

(3)A hostel for the aged, nursing home for the aged, a residential aged care building, Class 3

accommodation for the aged, Class 9a *health-care building* or a Class 9c *aged care building* need not comply with (1)(a) and (d) if handrails incorporating a raised dome button in accordance with AS/NZS 1428.4.1 are provided to warn people who are blind or have a vision impairment that they are approaching a stairway or ramp.

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