

Date: 15 May 2023
Our Ref: P230074

Elite Marble and Granite Furniture Pty Ltd
14 Harley Cr,
Condell Park NSW 2200
Att: Ms Rowena Huang

Dear Rowena,

**RE: 28A Harley Cr, Condell Park
BCA COMPLIANCE ASSESSMENT**

Please find enclosed our BCA Compliance Report prepared in respect of the existing premises situated at the above listed address.

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.

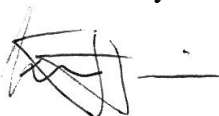
The inclusion of this summary enables an immediate understanding of the compliance status of the proposed design to be obtained.

- ☐ 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', with a horizontal line extending to the right.

Kieran Tobin
Director

BCA COMPLIANCE ASSESSMENT

PREPARED FOR

Elite Marble and Granite Furniture Pty Ltd

**REGARDING
28A Harley Cr, Condell Park**

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
P230074	1	Design Compliance Report	15 May 2023
Author	Kieran Tobin Senior NCC Consultant Registered Building Surveyor - Fair Trading no 0409 Grad Dip Building Surveying UWS		

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1.0 INTRODUCTION

1.1 GENERAL

This “BCA Compliance Assessment” report has been prepared at the request of Elite Marbel and Granite Furniture Pty Ltd and relates to the premises located at 28A Harley Cr, Condell Park.

The subject premises are occupied as an administrative office within the first floor and class 8 manufacturing within the ground floor.

This report is required for submission to Council with a view to establishing approval for the Planning Use within the premises.

1.2 REPORT BASIS

The content of this report reflects –

- (a) The principles and provisions of BCA 2022, Parts B, C, D, E & F4;
- (b) A site inspection of the existing premises on Thursday the 11th of May 2023 by BCA Vision
- (c) Existing Floor Plans prepared by Frassetto Design and dated 28/06/03

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

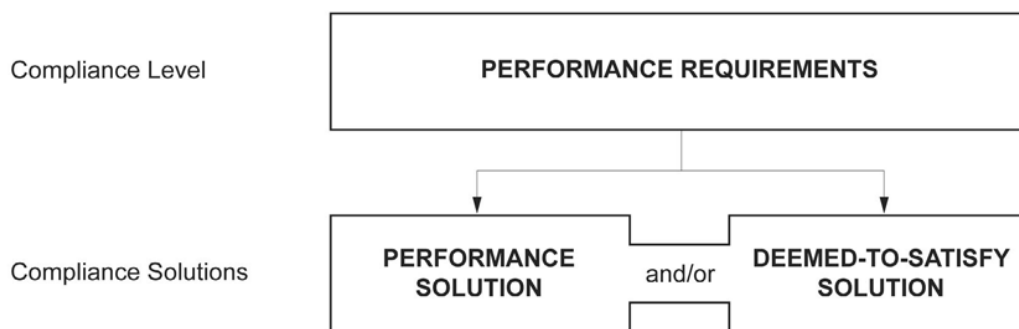
Compliance with the NCC is achieved by complying with—
(1) the Governing Requirements of the NCC; and
(2) the *Performance Requirements*.

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

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

Recommended Deemed-To-Satisfy Compliance Solutions		
	BCA Clause	Comment
1	D2D5	Exit Travel Distance The rear (West Side) Exit door expels to open space however the rear open space is landlocked, there is an inability to reach the road from that location In this regard the west side exit is not a compliant Exit point Egress to the east side Exit is greater than 40m and in this regard travel distance is not currently compliant We recommend engaging a Fire Safety Engineer to undertake a Performance Assessment in regard to Travel distance
2	D3D25	Exit Doors The Exit Door currently swings inward but is required to swing

		outward in the direction of egress
3	D3D26	Exit Door Hardware The Exit door handle must be substituted for a lever type handle that is 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
4	Part D4	Building Access – The Access to Premises Code Building Access No New works have been proposed/undertaken within the premises and in this regard there is no “New Part: as defined by the Access to Premises Code. In this regard there is no Legislative trigger requiring Building Access to be improved
5	E1D5	Fire Hose Reels The subject premises exceed 500m2 and in this regard require Fire Hose Reel Protection We recommend providing an AS 2441 compliant Fire Hose reel within 4m of the Exit and ensure coverage to the whole (unit) premises is available
6	E4D1 E4D2 E4D3 E4D4 E4D5 E4D6	Emergency Lighting, Exit and Directional Signage We rec commend that Emergency Lighting and Exit and directional Signage is provided throughout the premises

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 buildings are proposed to have a rise in storeys of two (2)

3.2 BUILDING CLASSIFICATION (CLAUSE A3.2)

The entire building incorporates the following classifications:-

CLASS	DESCRIPTION
5	an office building used for professional or commercial purposes
8	A building in which the production, assembling, altering, repairing, packing, finishing, or cleaning of goods or produce for sale takes place.

3.3 EFFECTIVE HEIGHT (CLAUSE A1.1)

The building has an effective height Not exceeding 12m.

Table 5 TYPE C CONSTRUCTION: FRL OF BUILDING ELEMENTS

Building element	Class of building—FRL: (in minutes)			
	Structural adequacy/ Integrity/ Insulation			
		5 and 8		
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—				
<input type="checkbox"/> Less than 1.5 m	<input type="checkbox"/>	90/ 90/ 90	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 1.5 to less than 3 m	<input type="checkbox"/>	60/ 60/ 60	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 3 m or more	<input type="checkbox"/>	—/—/—	<input type="checkbox"/>	<input type="checkbox"/>
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—				
<input type="checkbox"/> Less than 1.5 m	<input type="checkbox"/>	90/—/—	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 1.5 to less than 3 m	<input type="checkbox"/>	60/—/—	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 3 m or more	<input type="checkbox"/>	—/—/—	<input type="checkbox"/>	<input type="checkbox"/>
COMMON WALLS and FIRE WALLS—	<input type="checkbox"/>	90/ 90/ 90	<input type="checkbox"/>	<input type="checkbox"/>
INTERNAL WALLS-				
<input type="checkbox"/> Bounding <i>public corridors</i> , public lobbies and the like—	<input type="checkbox"/>	—/—/—	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Between or bounding <i>sole-occupancy units</i> —	<input type="checkbox"/>	—/—/—	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Bounding a stair if <i>required</i> to be rated—	<input type="checkbox"/>	60/ 60/ 60	<input type="checkbox"/>	<input type="checkbox"/>
ROOFS	<input type="checkbox"/>	—/—/—	<input type="checkbox"/>	<input type="checkbox"/>

3.4 General Floor Area Limitations (Table C2.2)

Type C Construction: –

Table C2.2 – Maximum size of Fire Compartments				
Building Class		Type A	Type B	Type C
6, 7, 8, 9a	Max Floor area Max Volume	5000 m ² 30,000 m ³	3500 m ² 21,000 m ³	2000 m² 12,000 m³

3.5 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 BCA Change of use has not occurred
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:	No new works are proposed or have been undertaken

	<p>(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</p> <p>(b) the measures contained in the building are inadequate:</p> <p>(i) to protect persons using the building, and to facilitate their egress from the building, in the event of fire, or</p> <p>(ii) to restrict the spread of fire from the building to other buildings nearby.</p>
2	<p>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>.</p> <p style="text-align: right;">For Reference</p>

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	<p>A fire hydrant system must be provided to the degree necessary to facilitate the needs of the <i>fire brigade</i> appropriate to</p> <ul style="list-style-type: none"> a) Fire-fighting operations; and b) The floor area of the building; and c) The fire hazard 	The building is greater than 500m2 in floor area a Fire Hydrant system is provided on site
EP1.4	<p>An <i>automatic</i> fire suppression system must be installed to the degree necessary to control the development and spread of fire appropriate to</p> <ul style="list-style-type: none"> 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	<p>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</p> <ul style="list-style-type: none"> 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	The building does Not provide sleeping accommodation

	detection of smoke so they may evacuate in the event of a fire to a <u>safe place</u> .	
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> <ul style="list-style-type: none"> 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	<p>The period of time occupants take to evacuate referred to in (a) must be appropriate to</p> <ul style="list-style-type: none"> 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 <u>fire load</u>; and v) the potential <u>fire intensity</u>; and vi) the <u>fire hazard</u>; and vii) any active <u>fire safety systems</u> installed in the building; and viii) <u>fire brigade</u> intervention. 	For Reference

3.6 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

BCA Vision Pty Ltd, P.O. Box 2278, Westfield Hornsby NSW 1635, (02) 9476 8613.
Building Compliance Report P230074 – 28A Harley Cr, Condell Park

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.

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

4 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				✓

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				✓
The property is provided coverage by a street Hydrant – flow and pressure compliance unknown				

3.1. SECTION F – HEALTH AND AMENITY

BCA reference	Complies	Does not comply	Detail required	Not relevant
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.

5.3 SECTION D – ACCESS AND EGRESS

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
D2D5	Exit travel distances Class 5, 6, 7, 8 or 9 buildings — (a) 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 space may be increased to 30 m. 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	Exit Travel Distance The rear (West Side) Exit door expels to open space however the rear open space is landlocked, there is an inability to reach the road from that location In this regard the west side exit is not a compliant Exit point Egress to the east side Exit is greater than 40m and in this regard travel distance is not currently compliant We recommend engaging a Fire Safety

		Engineer to undertake a Performance Assessment in regard to Travel distance
D2D6	<p>Distance between alternative exits [2019: D1.5]</p> <p>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 located so that alternative paths of travel do not converge such that they become less than 6 m apart.</p>	For Reference
D2D15	<p>Discharge from exits [2019: D1.10]</p> <p>(1)An exit must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit, or access to it.</p> <p>(2)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— (a)the minimum width of the required exit; or (b)1 m, whichever is the greater.</p> <p>(3)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— (a)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 D4; or (b)except if the exit is from a Class 9a building, a stairway complying with the Deemed-to-Satisfy Provisions of the BCA.</p> <p>(4)The discharge point of alternative exits must be located as far apart as practical.</p>	For Reference

	<p>(5)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.</p> <p>NSW D2D15(6)</p> <p>(6)In a Class 9b building containing an auditorium which accommodates more than 500 persons, not more than $\frac{2}{3}$ of the required width of exits must be located in the main entrance foyer.</p> <p>(7)The number of persons accommodated must be calculated according to D2D18.</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 must swing in the direction of egress</p>	<p>Exit Doors The Exit Door currently swings inward but is required to swing outward in the direction of egress</p>
D3D26	<p>Operation of latch [2019: D2.21]</p> <p>(1)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— (a)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 required to be accessible by Part D4— (i)be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch</p>	<p>Exit Door Hardware The Exit door handle must be substituted for a lever type handle that is 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</p>

5.4 SECTION E – SERVICES AND EQUIPMENT

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
E1D3	<p>Fire hose reels</p> <p>(1)E1D3 does not apply to— (a)a Class 2, 3 or 5 building or Class 4 part of a building; or (b)a Class 8 <i>electricity network substation</i>; or (c)a Class 9c building; or (d)classrooms and associated corridors in a primary or secondary <i>school</i>.</p> <p>(2)A fire hose reel system must be provided— (a)to serve the whole building where one or more internal fire hydrants are installed; or (b)where internal fire hydrants are not installed, to serve any <i>fire compartment</i> with a <i>floor area</i> greater than 500 m2.</p> <p>(3)The fire hose reel system must— (a)have fire hose reels installed in accordance with AS 2441; and (b)provide fire hose reels to serve only the <i>storey</i> at which they are located, except a <i>sole-occupancy unit</i> of not more than 2 <i>storeys</i> in a Class 6, 7, 8 or 9 building may be served by a single fire hose reel located at the level of egress from that <i>sole-occupancy unit</i> provided the fire hose reel can provide coverage to the whole of the <i>sole-occupancy unit</i>.</p> <p>(4)Fire hose reels must be located internally, externally or in combination, to achieve the system coverage specified in AS 2441.</p> <p>(5)In achieving system coverage, one or a combination of the following criteria for individual internally located fire hose reels must be met in determining the layout of any fire hose reel system: (a)Fire hose reels must be located adjacent to an internal fire hydrant (other than one within a fire-isolated <i>exit</i>), except that a fire hose reel need not be located adjacent to every fire hydrant, provided system coverage can be achieved. (b)Fire hose reels must be located within 4 m of an <i>exit</i>, except that a fire hose reel need not be located adjacent to every <i>exit</i>, provided system coverage can be achieved.</p>	<p>Fire Hose Reels</p> <p>The subject premises exceed 500m2 and in this regard require Fire Hose Reel Protection</p> <p>We recommend providing an AS 2441 compliant Fire Hose reel within 4m of the Exit and ensure coverage to the whole (unit) premises is available</p>

	<p>(c)Where system coverage is not achieved by compliance with (a) and (b), additional fire hose reels may be located in paths of travel to an <i>exit</i> to achieve the <i>required</i> coverage.</p> <p>(6)Fire hose reels must be located so that the fire hose will not need to pass through doorways fitted with fire or smoke doors, except— (a)doorways in walls referred to in C3D6(1)(e) in a Class 9a building and C3D6(5)(d) in a Class 9c building, separating ancillary use areas of high potential <i>fire hazard</i>; and</p> <p>(b)doorways in walls referred to in C3D13 or C3D14 separating equipment or electrical supply systems; and</p> <p>(c)doorway openings to <i>shafts</i> referred to in C4D14.</p> <p>(7)Where the normal water supply cannot achieve the flow and pressures required by AS 2441, or is unreliable— (a)a pump; or</p> <p>(b)water storage facility; or</p> <p>(c)both a pump and water storage facility, must be installed to provide the minimum flow and pressures required by clause 6.1 of AS 2441.</p>	
E4D2	<p>Emergency lighting requirements</p> <p>An emergency lighting system must be installed— (a)in every <i>fire-isolated stairway, fire-isolated passageway</i> or <i>fire-isolated ramp</i>; and</p> <p>(b)in every <i>storey</i> of a Class 5, 6, 7, 8 or 9 building where the <i>storey</i> has an area more than 300 m²— (i)in every passageway, corridor, hallway, or the like, that is part of the path of travel to an <i>exit</i>; and</p> <p>(ii)in any room having a <i>floor area</i> more than 100 m² that does not open to a corridor or space that has emergency lighting or to a road or <i>open space</i>; and</p> <p>(iii)in any room having a <i>floor area</i> more than 300 m²; and</p> <p>(c)in every passageway, corridor, hallway, or the like, having a length of more than 6 m from the entrance doorway of any <i>sole-occupancy unit</i> in a Class 2 or 3 building or Class 4 part of a building to the nearest doorway opening directly to— (i)a <i>fire-isolated stairway, fire-</i></p>	<p>Emergency Lighting, Exit and Directional Signage</p> <p>We rec commend that Emergency Lighting and Exit and directional Signage is provided throughout the premises</p>

	<p><i>isolated passageway</i> or <i>fire-isolated ramp</i>; or</p> <p>(ii)an external stairway serving instead of a <i>fire-isolated stairway</i> under D2D13; or</p> <p>(iii)an external balcony leading to a <i>fire-isolated stairway</i>, <i>fire-isolated passageway</i> or <i>fire-isolated ramp</i>; or</p> <p>(iv)a road or <i>open space</i>; and</p> <p>(d)in every <i>required non-fire-isolated stairway</i>; and</p> <p>(e)in a <i>sole-occupancy unit</i> in a Class 5, 6 or 9 building if— (i)the <i>floor area</i> of the unit is more than 300 m²; and</p> <p>(ii)an <i>exit</i> from the unit does not open to a road or <i>open space</i> or to an external stairway, passageway, balcony or ramp, leading directly to a road or <i>open space</i>; and</p> <p>(f)in every room or space to which there is public access in every <i>storey</i> in a Class 6 or 9b building if— (i)the <i>floor area</i> in that <i>storey</i> is more than 300 m²; or</p> <p>(ii)any point on the floor of that <i>storey</i> is more than 20 m from the nearest doorway leading directly to a stairway, ramp, passageway, road or <i>open space</i>; or</p> <p>(iii)egress from that <i>storey</i> involves a vertical rise within the building of more than 1.5 m, or any vertical rise if the <i>storey</i> concerned does not admit sufficient light; or</p> <p>(iv)the <i>storey</i> provides a path of travel from any other <i>storey required</i> by (i), (ii) or (iii) to have emergency lighting; and</p> <p>(g)in a Class 9a <i>health-care building</i>— (i)in every passageway, corridor, hallway, or the like, serving a <i>treatment area</i> or a <i>ward area</i>; and</p> <p>(ii)in every room having a <i>floor area</i> of more than 120 m² in a <i>patient care area</i>; and</p> <p>(h)in every Class 9c building excluding within <i>sole-occupancy units</i>; and in every <i>required</i> fire control centre.</p>	
E4D3	<p>Measurement of distance</p> <p>Distances, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.</p>	

E4D4	Design and operation of emergency lighting Every <i>required</i> emergency lighting system must comply with AS/NZS 2293.1.
E4D5	Exit signs An <i>exit</i> sign must be clearly visible to persons approaching the <i>exit</i> , and must be installed on, above or adjacent to each— (a)door providing direct egress from a <i>storey</i> to— (i)an enclosed stairway, passageway or ramp serving as a <i>required exit</i> ; and (ii)an external stairway, passageway or ramp serving as a <i>required exit</i> ; and (iii)an external access balcony leading to a <i>required exit</i> ; and (b)door from an enclosed stairway, passageway or ramp at every level of discharge to a road or <i>open space</i> ; and (c) <i>horizontal exit</i> ; and (d)door serving as, or forming part of, a <i>required exit</i> in a <i>storey required</i> to be provided with emergency lighting in accordance with E4D2.
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> .
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.

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