

Date: 15 June 2023 Our Ref: P230096

Corona Projects Suite 106/35 Spring Street Bondi Junction NSW 2022 Att: Mr Alex Machkevitch

Dear Alex,

RE: Unit 3, 132 Newton Rd, Wetherill Park BCA COMPLIANCE ASSESSMENT

Please find enclosed our BCA Compliance Report prepared in respect of the proposed design contained within the architectural documentation provided.

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

Corona Projects

REGARDING Unit 3, 132 Newton Rd, Wetherill 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
P230096	1	Design Compliance Report	15 June 2023
Author		Kieran Tobin Senior NCC Consultant Registered Building Surveyor - Fa Grad Dip Building Surveying UW	

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1.0 Introduction

1.1 GENERAL

This "BCA Compliance Assessment" report has been prepared at the request of Corona Projects, and relates to the premises located at Unit 3, 132 Newton Rd, Wetherill Park.

The project proposal is for use of the premises of a recycling facility. The existing building is a factory building situated within an industrial estate.

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 premises on Tuesday 13/06/23
- (c) Fire Evacuation Plan prepared by Goterra and dated 08/02/23

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;
- (j) Heritage significance;
- (k) Consideration of energy or water authority requirements;
- (l) 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, 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.

1.5 EXISTING BUILDINGS – LEGISLATION TRIGGERING BUILDING UPGRADE

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;

BCA Vision Pty Ltd, P.O. Box 2278, Westfield Hornsby NSW 1635, (02) 9476 8613. Building Compliance Report P230096– Unit 3, 132 Newton Rd, Wetherill Park

(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.

1.6 Fire Safety Upgrades to existing Buildings (EP & A Regs)

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

93 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.	The proposed use is class 8 We have not been advised of the previous use 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	For Reference	

building's proposed use.

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

94 CONSENT AUTHORITY MAY REQUIRE BUILDINGS TO BE UPGRADED

94 CONSENT	94 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.	The proposed works represent greater than 50% of the building floor area			
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			

2.0 MATTERS IDENTIFIED / RECOMMENDATIONS

2.1 COMPLIANCE PATHWAYS WITHIN THE BCA

Compliance with the NCC is achieved by complying with—

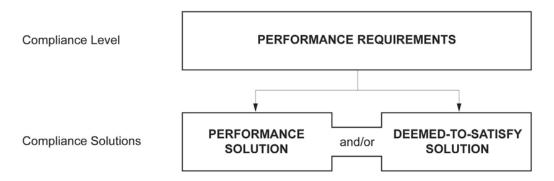
- (1) the Governing Requirements of the NCC; and
- (2) the Performance Requirements.

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 ISSUES IDENTIFIED

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

Deemed-To	Deemed-To-Satisfy Compliance – Key Considerations				
Item	BCA	Comment			
No.	Clause				

1.	C2D2,	Fire Resistance of External Walls
	Spec 5	The building is simple portal frame construction with tilt up concrete
	C3D3	panels which is typical for warehouse construction.
		However the floor area and volume of the building exceeds the maximum
	C3D8	requirements of Table C3D3 because the steel structure penetrates the
	C2D11	wall between Units 3 and 4; which results in Units 3 and 4 being 1 fire
	C3D3	compartment.
	C3D4	Unit 3 and 4 combined have a floor area of 5929.8m2 and an approximate
	C3D5	volume of 36,172m3.
	E1D4	The building cannot comply as a large Isolated Building as there is not a
	E1D12	continuous ring road (required by Clause C3D5) around the full perimeter
		of the building.
		Altering the building construction to provide a compliant fire separating
		wall (thus reducing the fire compartment size) or to provide a ring road
		(to achieve compliance for a large isolated building) would be prohibitive due to its cost and complexity.
		due to its cost and complexity.
		Our recommendation is to discuss the building construction with a C10
		Registered Fire Safety Engineer to determine the merits of a Performance
		Approach to building fire safety
2.	D2D8	Egress Width
	220	The stair from the first floor is less than the required 1000mm clear width
		(approximately 960mm) however for the small population within the first
		floor it is our opinion that this will provide an adequate width for egress.
		We recommend that equipment is generally positioned to allow for a
		minimum clear pathway of 1000mm.
3.	D3D9	Under Stair Enclosure
		A Cupboard exists beneath the internal office stair
		The cupboard requires an enclosure that achieves 60/60/60 fire separation and a self closing -/60/30 door and frame
4	D3D19	Stair Handrail Height and Openings
4.		The stair providing access to and from the first floor is not compliant due
	D3D22	to:-
		The hand rail height above nosing is less than the required 865mm
		(approximately 760mm) as measured above the nosing; and
		Has openings greater than 125mm (approximately 400mm openings
		We recommend modifying the hand rail to raise it to a compliant height of
		865mm and reduce the openings to 125mm or less
5.	D3D25	Swinging Exit Doors
<i>J</i> .		Exit doors to the south side Office and Exit door adjacent to the Loading
		dock should be modified to swing outward in the direction of egress
6.	D3D26	Exit Door Hardware
		We recommend that the door hardware to each exit door is substituted for
		door hardware which is readily openable—
		(i) without a key from the side that faces a person seeking egress; and
		(ii) by a single hand pushing action on a single device such as a Lever Handle located between 900 mm and 1.2 from the floor
		rimidic foculed octiveen 700 mm and 1.2 mom the moor

7.	Part D4 D4D5	Building Accessibility and The Access to Premises Code The office position of the premises has no proposed changes and in this regard the Access to Premises requirement for compliant "New Part" and "Affected Part" do not apply In our opinion the warehouse portion of the premises gains an exemption under clause D4D5 and in this regard there is no trigger for upgrade to achieve compliance with the Accessibility requirements of Part D4 of the
0	D E4	BCA and AS 1428.1 - 2009 Emergency Lighting
8.	Part E4	We recommend engaging a Fire Services Company to review Emergency Lighting provisions within the Warehouse and office areas
9.	Part E4	Exit and Directional Signage Exit signage is required - above the stairs within the first floor portion of the office - To the external doors from the office area Additional Directional Signage is required within the warehouse Where an Exit sign is not directly visible a Directional sign should be provided to clarify the paths of egress within the building

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 One (1).

3.2 BUILDING CLASSIFICATION (CLAUSE A3.2)

The Building will contain the following classifications

Class	Description
5	An administrative office
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

The buildings have an effective height of greater than 12m and less than 25m.

3.4 TYPE OF CONSTRUCTION (CLAUSE C2D2, TABLE 5) Specification 5 - Type B Construction

TYPE B CONSTRUCTION: FRL OF BUILDING ELEMENTS

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		
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building						
element, where the dista	nce from any fire-so	urce feature to which it is	s exposed is—			
less than 1.5 m	90/ 90/ 90	120/120/120	180/180/180	240/240/240		
1.5 to less than 3 m	90/60/30	120/ 90/ 60	180/120/90	240/180/120		
3 to less than 9 m	90/30/30	120/30/30	180/ 90/ 60	240/ 90/ 60		
9 to less than 18 m	90/ 30/-	120/30/-	180/ 60/-	240/60/-		
18 m or more	-/-/-	-/-/-	-/-/-	-/-/-		
For non-loadbearing par	:s—					
less than 1.5 m	-/ 90/ 90	-/120/120	-/180/180	-/240/240		
1.5 to less than 3 m	-/ 60/ 30	-/ 90/ 60	-/120/ 90	-/180/120		
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 itis						
EXTERNAL COLUMN not	incorporated in an ex	<i>xternal wall,</i> where the d	listance from any fire-so	ource feature to which itis		
exposed is—	incorporated in an ex	xternal wall, where the d	listance from any fire-so	ource feature to which itis		
	•	xternal wall, where the d	listance from any <i>fire-so</i>	ource feature to which itis		
exposed is—	•	xternal wall, where the d	listance from any <i>fire-so</i>	purce feature to which itis 240/-/-		
exposed is— For <i>loadbearing</i> columns	<u> </u>	, 				
exposed is— For <i>loadbearing</i> columns less than 18 m	90/-/-	120/-/-	180/-/-	240/-/-		
exposed is— For <i>loadbearing</i> columns less than 18 m 18 m or more	90/-/-	120/-/-	180/-/-	240/-/-		
exposed is— For loadbearing columns less than 18 m 18 m or more For non-loadbearing columns	90/-/- 90/-/- -/-/-	120/-/-	180/-/-	240/-/-		
exposed is— For loadbearing columns less than 18 m 18 m or more For non-loadbearing columns For non-loadbearing	90/-/- 90/-/- -/-/-	120/-/-	180/-/-	240/-/-		
exposed is— For loadbearing columns less than 18 m 18 m or more For non-loadbearing columns— columns—		120/-/- -/-/-	180/-/- -/-/-	240/-/- -/-/-		
exposed is— For loadbearing columns less than 18 m 18 m or more For non-loadbearing columns— COMMON WALLS and		120/-/- -/-/-	180/-/- -/-/-	240/-/- -/-/-		
exposed is— For loadbearing columns less than 18 m 18 m or more For non-loadbearing columns— columns— common walls and fire walls—	90/-/- -/-/- mns -/-/- 90/ 90 / 90	120/-/- -/-/-	180/-/- -/-/-	240/-/- -/-/-		
exposed is— For loadbearing columns less than 18 m 18 m or more For non-loadbearing columns— COMMON WALLS and FIRE WALLS— INTERNAL WALLS—	90/-/- -/-/- mns -/-/- 90/ 90 / 90	120/-/- -/-/-	180/-/- -/-/-	240/-/- -/-/-		
exposed is— For loadbearing columns less than 18 m 18 m or more For non-loadbearing columns— COMMON WALLS and FIRE WALLS— INTERNAL WALLS— Fire-resisting lift and stai	90/-//-/- Imns 90/ 90 / 90 90/ 90 / 90	120/-/- -/-/- -/-/- 120/120/120	180/-/- -/-/- -/-/- 180/180/180	240/-/- -/-/- -/-/- 240/240/240		

Bounding <i>public corridors</i> , public lobbies and the like—						
Loadbearing	60/ 60/ 60	120/-/-	180/-/-	240/-/-		
Non-loadbearing	-/ 60/ 60	-/-/-	-/-/-	-/-/-		
Between or bounding sole-	occupancy units—					
Loadbearing	60/ 60/ 60	120/-/-	180/-/-	240/-/-		
Non-loadbearing	-/ 60/ 60	-/-/-	-/-/-	-/-/-		
OTHER LOADBEARING	60/-/-	120/-/-	180/-/-	240/-/-		
INTERNAL WALLS and	INTERNAL WALLS and					
COLUMNS—						
ROOFS	-/-/-	-/-/-	-/-/-	-/-/-		

3.5 GENERAL FLOOR AREA LIMITATIONS (TABLE C3D3)

The Total Floor area and volume is approximately-

- Unit 3, Approximate 2749.9 m2 floor area
- Unit 3, Approximate 16,774m3 Volume
- Unit 3 + 4, Approximate 5929.8 m2 floor area
- Unit 3+4, Approximate 36,172m3 Volume

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

Table C2.2 – Maximum size of Fire Compartments						
Building Class						
5, 9b, 9c	Max Floor area	8000 m ²	5,500 m ²	3000 m ²		
	Max Volume	48,000 m ³	33,000 m ³	18,000 m ³		
6, 7, 8, 9a	Max Floor area	5000 m ²	3500 m ²	2000 m ²		
	Max Volume	30,000 m ³	21,000 m ³	12,000 m ³		

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.

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 Detail		Dotail	Not
DCA reference	Compiles	comply	Required	relevant
C2D1 Deemed to Setisfy Provisions		✓	Required	
C2D1 - Deemed-to-Satisfy Provisions C2D4 - Buildings of multiple classification		V		✓
C2D5 - Mixed types of construction				<u>/</u>
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				V
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				Y
Class 4 parts C4D13 Openings in floors and sailings for services				
C4D14 Openings in floors and ceilings for services				· ·
C4D14- Openings in shafts				✓
C4D15- Openings for service installations				✓
C4D17- Columns protected with lightweight construction to				• • • • • • • • • • • • • • • • • • •
C4D17- Columns protected with lightweight construction to				•
achieve an FRL				

4.3 SECTION D – ACCESS AND EGRESS

BCA reference	Complies	Does not comply	Detail	Not relevant
			Required	
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			✓	
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	ļ.,,			✓
D3D14 - Goings and risers	*			
D3D15 - Landings	*			
D3D16 - Thresholds	✓			
D3D17 - Barriers to prevent falls				V
D3D18 - Height of barriers				✓
D3D19 - Openings in barriers			V	
D3D20 - Barrier climbability				V
D3D21 - Wire barriers				✓
D3D22 - Handrails			✓	
D3D23 - Fixed platforms, walkways, stairways and ladders				✓
D3D24 - Doorways and doors			✓	
D3D25 - Swinging doors		√		
D3D26 - Operation of latch		Y		✓
D3D27 - Re-entry from fire-isolated exits				✓
D3D28 - Signs on doors				✓
D3D29 - Protection of openable windows				./
D3D30 - Timber stairways: Concession			√	y
D4D2 - General building access requirements			▼	
D4D3-Access to buildings D4D4 -Parts of buildings to be accessible			∀	
			V	
D4D5 - Exemptions			V	./
D4D7 Signers				✓
D4D7 - Signage				→
D4D8 -Hearing augmentation				→
D4D9 -Tactile indicators D4D10- Wheelchair seating spaces in Class 9b assembly				<i>'</i>
buildings				•
ounumga	1		l .	

D4D11-Swimming pools		✓
D4D12-Ramps		✓
D4D13-Glazing on an accessway		✓

4.4 SECTION E – SERVICES AND EQUIPMENT

			5	
BCA reference	Complies	Does not comply	Detail	Not relevant
			Required	
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				✓
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,				1
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				1
E3D6 -Landings				√
E3D7 -Passenger lift types and their limitations	<u> </u>	<u> </u>		₩

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			✓
√ (*) = Location is compliant – Flow, pressure and operation not	qualified by BCA Vision		

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

5.2 SECTION C – FIRE RESISTANCE

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
C2D2	Type of construction required (1)The minimum Type of <i>fire-resisting construction</i> of a building must be determined in accordance with Table C2D2, except as allowed for— (a)certain Class 2, 3 or 9c buildings, in C2D6; and (b)a Class 4 part of a building located on the top <i>storey</i> , in C2D4(2); and (c) <i>open spectator stands</i> and indoor sports stadiums, in C2D8. (2)Each building element must comply with Specification 5 as applicable.	Fire Resistance The building is simple portal frame construction with tilt up concrete panels which is typical for warehouse construction. However the floor area and volume of the building exceeds the maximum requirements of Table C3D3 because the steel structure penetrates the wall between Units 3 and 4; which results in Units 3 and 4 being 1 fire

		compartment. Unit 3 and 4 combined have a floor area of 5929.8m2 and an approximate volume of 36,172m3. The building cannot comply as a large Isolated Building as there is not a continuous ring road (required by Clause C3D5) around the full perimeter of the building. Altering the building construction to provide a compliant fire separating wall (thus reducing the fire compartment size) or to provide a ring road (to achieve compliance for a large isolated building) would be prohibitive due to its cost and complexity.
		Our recommendation is to discuss the building construction with a C10 Registered Fire Safety Engineer to determine the merits of a Performance Approach to building fire safety
C3D8	Separation by fire walls (1)Construction — A fire wall must be constructed in accordance with the following: (a)The fire wall has the relevant FRL prescribed by Specification 5 for each of the adjoining parts, and if these are different, the greater FRL, except where S5C18(c), S5C21(3) and S5C25(1) permit a lower FRL on the carpark side.	The tenancy wall between Units 3 and 4 is penetrated by the steel sections of the Portal Frame construction and in this regard is not an compliant Fire Separating wall

	(b)Any openings in a fire wall must not reduce the FRL required by Specification 5 for the fire wall, except where permitted by the Deemed-to-Satisfy Provisions of Part C4.	
	(c)Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not pass through or cross the fire wall unless the required fire-	
	resisting performance of the fire wall is maintained.	
	(2)Separation of buildings — A part of a building separated from the remainder of the building	
	by a fire wall may be treated as a separate building for the purposes of the Deemed-to-Satisfy Provisions of Sections C, D and E if it is constructed in accordance with (1) and the following:	
	(a) The fire wall extends through all storeys and spaces in the nature of storeys that are common	
	to that part and any adjoining part of the building.	
	(b)The fire wall is carried through to the underside of the roof covering.	
	(c)Where the roof of one of the adjoining parts is lower than the roof of the other part, the fire wall extends to the underside of— (i)the covering of the higher roof, or not less than 6 m above	
	the covering of the lower roof; or	
	(ii)the lower roof if it has an FRL not less than that of the fire wall and no openings closer than	
	3 m to any wall above the lower roof; or	
	(iii)the lower roof if its covering is non-combustible and the lower part has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.	
	(3)Separation of fire compartments — A part of a building separated from the remainder of the	
	building by a fire wall may be treated as a separate fire compartment if it is constructed in	
	accordance with (a) and the fire wall extends to the underside of— (a)a floor having an FRL required for a fire wall; or the roof covering.	
C3D4	Large isolated buildings	For Reference
	[2019 C2.3]	
	The size of a fire compartment in a building may exceed that specified in Table C3D3 where—	
	(a)the building does not exceed 18 000 m2 in floor area nor exceed 108 000 m3 in volume, if— (i)the building is Class 7 or 8 and— (A)contains not more than 2 storeys; and	
	(B) is provided with open space complying with C3D5(1) not less than 18 m wide around the	
	building; or	

	(ii)the building is Class 5, 6, 7, 8 or 9 and is— (A)protected throughout with a sprinkler system complying with Specification 17; and (B)provided with a perimeter vehicular access complying with C3D5(2); or (b)the building is Class 5, 6, 7, 8 or 9 and exceeds 18 000 m2 in floor area or 108 000 m3 in volume, if it is— (i)protected throughout with a sprinkler system complying with Specification 17; and (ii)provided with a perimeter vehicular access complying with C3D5(2); or (c)there is more than one building on the allotment and— (i)each building complies with (a) or (b); or (ii)if the buildings are closer than 6 m to each other they are regarded as one building and collectively comply with (a) or (b).	
C3D5	Requirements for open spaces and vehicular access [2019: C2.4] (1)An open space required by C3D4 must— (a)be wholly within the allotment except that any road, river, or public place adjoining the allotment, but not the farthest 6 m of it may be included; and (b)include vehicular access in accordance with (2); and (c)not be used for the storage or processing of materials; and (d)not be built upon, except for guard houses and service structures (such as electricity substations and pump houses) which may encroach upon the width of the space if they do not unduly impede fire-fighting at any part of the perimeter of the allotment or unduly add to the risk of spread of fire to any building on an adjoining allotment. (2)Vehicular access required by this Part— (a)must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from a public road around the entire building; and (b)must have a minimum unobstructed width of 6 m with no part of its furthest boundary more than 18 m from the building and in no part of the 6 m width be built upon or used for any purpose other than vehicular or pedestrian movement; and	For Reference

	(c)must provide reasonable pedestrian access from the vehicular access to the building; and (d)must have a load bearing capacity and unobstructed height to permit the operation and passage of fire brigade vehicles; and (e)must be wholly within the allotment except that a public road complying with (a), (b), (c) and (d) may serve as the vehicular access or part thereof.	
C3D9	Separation of classifications in the same storey (1) If a building has parts of different classifications located alongside one another in the same storey— (a) each building element in that storey must have the higher FRL prescribed in Specification 5 for that element for the classifications concerned; or (b) the parts must be separated in that storey by a fire wall. (2) A fire wall required by (1)(b) must have the FRL prescribed in accordance with Specification 5 as applicable for that element for the Type of construction and the classifications concerned. (3) For the purposes of (2), the FRL in Specification 5 must be either— (a) the higher FRL prescribed in Table S5C11d or S5C21d; or (b) the FRL prescribed in Table S5C24c. (4) For the purposes of (1), where one part is a carpark complying with S5C19, S5C22 or S5C25, the parts may be separated by a fire wall complying with S5C19, S5C22 or as appropriate	For reference

5.3 SECTION D – ACCESS AND EGRESS

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
D2D8	Width of exits and paths of travel to exits [2019: D1.6(b), (c), (d) and (e)] (1)The unobstructed width of each required exit or path of travel to an exit, except for ladders provided in accordance with D2D21, D3D23 or I3D5, and doorways, must be not less than— (a)1 m; or area or ward area; and 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a (b)treatment (c)in a public corridor in a Class 9c aged care building, notwithstanding (2) and (3)—(i)1.5 m; and (ii)1.8 m for the full width of the doorway, providing access into a sole-occupancy unit or communal bathroom. (2)If the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than—(a)1 m plus 250 mm for each 25 persons (or part) in excess of 100; or 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a (b)treatment area or ward area. (3)If the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than—(a)2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or (b)in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200. (4)In an open spectator stand which accommodates more than 2000 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than 17 m plus a width (in metres) equal to the number in excess of 2000 divided by 600.	Egress Width The stair from the first floor is less than the required 1000mm clear width (approximately 960mm) however for the small population within the first floor it is our opinion that this will provide an adequate width for egress. We recommend that equipment is generally positioned to allow for a minimum clear pathway of 1000mm

D2D10	Exit width not to diminish in direction of travel The unobstructed width of a <i>required exit</i> must not diminish in the direction of travel to a road or <i>open space</i> , except where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i).	For reference
D2D11	Determination and measurement of exits and paths of travel to exits For the purposes of D2D7 to D2D10 the following apply: (a)The <i>required</i> width of a stairway or ramp in a <i>required exit</i> or path of travel to an <i>exit</i> must— (i)be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; and	For reference
	(ii)extend without interruption, except for ceiling cornices, to a height not less than 2 m vertically above a line along the nosings of the treads or the floor surface of the ramp or landing.(b)To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18.	
D3D8	Installations in exits and paths of travel (1)Access to service <i>shafts</i> and services other than to fire-fighting or detection equipment as permitted in the <i>Deemed-to-Satisfy Provisions</i> of Section E, must not be provided from a <i>fire-isolated stairway</i> , <i>fire-isolated passageway</i> or <i>fire-isolated ramp</i> . (2)An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like, must not be located in any part of a <i>required exit</i> or any corridor, hallway, lobby or the like leading to a <i>required exit</i> . (3)Gas or other fuel services must not be installed in a <i>required exit</i> . (4)Except for in a fire-isolated <i>exit</i> specified in (1), services or equipment enclosed in accordance with (5) may be installed in a <i>required exit</i> , or in any corridor, hallway, lobby or the like leading to a <i>required exit</i> , where that service or equipment comprises— (a)electricity meters, distribution boards or ducts; or	For reference
	(b)central telecommunications distribution boards or equipment; or (c)electrical motors or other motors serving equipment in the building. (5)An enclosure for the purposes of (4) must be suitably sealed against smoke spreading from	

	the enclosure and be— (a) <i>non-combustible</i> construction; or (b)a <i>fire-protective covering</i> . (6)Electrical wiring may be installed in a fire-isolated <i>exit</i> if the wiring is associated with— (a)a lighting, detection, or pressurisation system serving the <i>exit</i> ; or (b)a security, surveillance or management system serving the <i>exit</i> ; or (c)an intercommunication system or an audible or visual alarm system in accordance with D3D27; or the monitoring of hydrant or sprinkler isolating valves.	
D3D9	Enclosure of space under stairs and ramps (1)Fire-isolated stairways and ramps — If the space below a required fire-isolated stairway or fire-isolated ramp is within the fire-isolated shaft, it must not be enclosed to form a cupboard or similar enclosed space. (2)Non fire-isolated stairways and ramps — The space below a required non fire-isolated stairway (including an external stairway) or non fire-isolated ramp must not be enclosed to form a cupboard or other enclosed space unless— (a)the enclosing walls and ceilings have an FRL of not less than 60/60/60; and any access doorway to the enclosed space is fitted with a self-closing –/60/30 fire door	Under Stair Enclosure A Cupboard exists beneath the internal office stair The cupboard requires an enclosure that achieves 60/60/60 fire separation and a self closing -/60/30 door and frame
D3D19	Openings in barriers (1)Except where allowed by (2), openings in a <i>required</i> barrier must not allow a 125 mm sphere to pass through. (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	Stair Handrail Height and Openings The stair providing access to and from the first floor is not compliant due to: Has openings greater than 125mm (approximately 400mm openings)
	(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 (ii)the opening between rails must not be more than 460 mm.	
	(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

(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 *landing*, balcony or the like; and

(ii) the opening between the rails must not be more than 460 mm.

(4) The requirements of (2) do not apply to external stairways, external ramps, or *fire-isolated stairways* or *fire-isolated ramps* serving Class 9b *early childhood centres*.

(5) For a barrier provided under (1), the maximum 125 mm barrier opening for a stairway, such as a non *fire-isolated stairway*, is measured above the nosing line of the stair treads.

(6) Where a *required* barrier is fixed to the vertical face forming an edge of a *landing*, balcony, deck, stairway or the like, the opening formed between the barrier and the face must not exceed 40 mm.

(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.

D3D22

Handrails

(1)Except for handrails referred to in D3D23, and subject to (2), handrails must— (a)be located along at least one side of the ramp or *flight*; and

(b)be located along each side if the total width of the stairway or ramp is 2 m or more; and

(c)in a Class 9b building used as a primary *school* or a building that contains an *early childhood centre*— (i)have one handrail fixed at a height of not less than 865 mm; and

(ii)in addition to (i), have a handrail—(A)fixed at a height between 665 mm and 750 mm in a primary *school*; and

(B)with a cross-sectional dimension not less than 16 mm and not greater than 45 mm as measured in any direction across its centre, fixed at a height between 450 mm and 700 mm in a Class 9b *early childhood centre*; and

(d)in any other case, be fixed at a height of not less than 865 mm; and

(e)be continuous between stair *flight* landings and have no obstruction on or above them that

Stair Handrail Height and Openings The stair providing access to and from the first floor is not compliant due to:-The hand rail height above nosing is less than the required 865mm (approximately 760mm) as measured above the nosing; will tend to break a hand-hold; and

(f)in a *required exit* serving an area *required* to be *accessible*, be designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail *required* by (1)(c)(ii).

- (2) The height *required* by (1)(c) and (d) is measured above the nosings of stair treads and the floor surface of the ramp, landing or the like.
- (3)Handrails— (a)in a Class 9a *health-care building* must be provided along at least one side of every passageway or corridor used by patients, and must be— (i)fixed not less than 50 mm clear of the wall; and
- (ii)where practicable, continuous for their full length; and
- (b)in a Class 9c *aged care building* must be provided along both sides of every passageway or corridor used by residents, and must be— (i)fixed not less than 50 mm clear of the wall; and
- (ii) where practicable, continuous for their full length.
- (4) Handrails *required* to assist people with a disability must be provided in accordance with D4D4.
- (5)Handrails to a stairway or ramp within a *sole-occupancy unit* in a Class 2 or 3 building or Class 4 part of a building must— (a)be located along at least one side of the *flight* or ramp; and
- (b)be located along the full length of the *flight* or ramp, except in the case where a handrail is associated with a barrier, the handrail may terminate where the barrier terminates; and
- (c)have the top surface of the handrail not less than 865 mm vertically above the nosings of the stair treads or the floor surface of the ramp; and
- (d)have no obstruction on or above them that will tend to break a handhold, except for newel posts, ball type stanchions, or the like.
- (6) The requirements of (5) do not apply to—(a) handrails referred to in D3D23; or
- (b)a stairway or ramp providing a change in elevation of less than 1 m; or

	(c)a landing; or a winder where a newel post is installed to provide a handhold.	
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 (b)must swing in the direction of egress unless— (i)it serves a building or part with a floor area not more than 200 m2, it is the only required exit from the building or part and it is fitted with a device for holding it in the open position; or (ii)it serves a sanitary compartment or airlock (in which case it may swing in either direction); and (c)must not otherwise impede the path or direction of egress. (2)The measurement of encroachment referred to in (1)(a) in each case is to include door handles or other furniture or attachments to the door.	Swinging Exit Doors Exit doors to the south side Office and Exit door adjacent to the Loading dock should be modified to swing outward in the direction of egress
D3D26	Operation of latch (1)A door in a <i>required exit</i> , forming part of a <i>required exit</i> or in the path of travel to a <i>required exit</i> 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 <i>required</i> to be <i>accessible</i> 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; and (ii)have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or (b)a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor. (2)Where the latch operation device referred to in (1)(b) is not located on the door leaf itself— (a)manual controls to power-operated doors must be at least 25 mm wide, proud of	Exit Door Hardware We recommend that the door hardware to each exit door is substituted for door hardware which is readily openable— (i)without a key from the side that faces a person seeking egress; and (ii)by a single hand pushing action on a single device such as a Lever Handle located between 900 mm and 1.2 from the floor

the surrounding surface and located—(i)not less than 500 mm from an internal corner; and

- (ii) for a hinged door, between 1 m and 2 m from the door leaf in any position; and
- (iii) for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position; and
- (b)braille and tactile signage complying with S15C3 and S15C6 must identify the latch operation device.
- (3) The requirements of (1) and (2) do not apply to a door that—(a) serves a vault, strongroom, *sanitary compartment*, or the like; or
- (b)serves only, or is within— (i)a *sole-occupancy unit* in a Class 2 building or a Class 4 part of a building; or
- (ii) a *sole-occupancy unit* in a Class 3 building (other than an entry door to a *sole-occupancy unit* of a boarding house, guest house, hostel, lodging house or backpacker accommodation); or
- (iii) a sole-occupancy unit with a floor area not more than 200 m2 in a Class 5, 6, 7 or 8 building; or
- (iv)a space which is otherwise inaccessible to persons at all times when the door is locked; or (c)complies with (4) and serves— (i)Australian Government Security Zones 4 or 5; or
- (ii) the secure parts of a bank, *detention centre*, mental health facility, *early childhood centre* or the like; or
- (d)is fitted with a fail-safe device which *automatically* unlocks the door upon the activation of any sprinkler system (other than a FPAA101D system) complying with Specification 17 or smoke, or any other detector system deemed suitable in accordance with AS 1670.1 installed throughout the building, and is readily openable when unlocked; or
- (e)is in a Class 9a or 9c building and— (i)is one leaf of a two-leaf door complying with D2D9(1)(a) or D2D9(1)(d) provided that it is not held closed by a locking mechanism and is readily openable; and
- (ii)the door is not *required* to be a fire door or smoke door.

(4)A door referred to in (3)(c) must be able to be immediately unlocked— (a)by operating a fail-safe control switch, not contained within a protective enclosure, to actuate a device to unlock the door; or

(b)by hand by a person or persons, specifically nominated by the owner, properly instructed as to the duties and responsibilities involved and available at all times when the building is lawfully occupied so that persons in the building or part may immediately escape if there is a fire.

(5)The requirements of (1) and (2) do not apply in a Class 9b building (other than a *school*, an *early childhood centre* or a building used for religious purposes) to a door in a *required exit*, forming part of a *required exit* or in the path of travel to a *required exit* serving a *storey* or room accommodating more than 100 persons, determined in accordance with D2D18, in which case it must be readily openable— (a)without a key from the side that faces a person seeking egress; and

(b) by a single hand pushing action on a single device such as a panic bar located between 900 mm and 1.2 m from the floor; and

(c)where a two-leaf door is fitted, the provisions of (a) and (b) need only apply to one door leaf if the appropriate requirements of D2D9 are satisfied by the opening of that one leaf.

D4D2 General building access requirements

(1)Buildings and parts of buildings must be *accessible* as *required* 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 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

Building Accessibility and The Access to Premises Code

The office position of the premises has no proposed changes and in this regard the Access to Premises requirement for compliant "New Part" and "Affected Part" do not apply In our opinion the warehouse portion of

the premises gains an exemption under clause D4D5 and in this regard there is no trigger for upgrade to achieve compliance

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 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.

with the Accessibility requirements of Part D4 of the BCA and AS 1428.1 -2009

- (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 <i>swimming pools</i> , to and into <i>swimming pools</i> with a total perimeter greater than 40 m, associated with a Class 1b, 2, 3, 5, 6, 7, 8 or 9 building that is <i>required</i> to be <i>accessible</i> , but not <i>swimming pools</i> for the exclusive use of occupants of a Class 1b building or a <i>sole-occupancy unit</i> 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	For Reference
	(b)from another <i>accessible</i> building connected by a pedestrian link; and from any <i>required</i> accessible carparking space on the allotment. (2)In a building <i>required</i> to be <i>accessible</i> , an <i>accessway</i> 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 <i>floor area</i> more than 500 m2, a pedestrian entrance which is not <i>accessible</i> must not be located more than 50 m from an <i>accessible</i> pedestrian entrance, except for pedestrian entrances serving only areas exempted by D4D5. (3)Where a pedestrian entrance <i>required</i> to be <i>accessible</i> has multiple doorways— (a)if the pedestrian entrance consists of not more than 3 doorways— not less than 1 of those doorways must be <i>accessible</i> ; and	
	(b)if a pedestrian entrance consists of more than 3 doorways — not less than 50% of those doorways must be <i>accessible</i> . (4)For the purposes of (3)— (a)an <i>accessible</i> 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 <i>accessway</i> 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	For reference
	(ii)for a stairway, except a <i>fire-isolated stairway</i> , clause 11 of AS 1428.1; and (iii)for a <i>fire-isolated stairway</i> , 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 <i>accessways</i> where it is not possible to continue travelling along the <i>accessway</i> ; and	
	(B)at maximum 20 m intervals along the <i>accessway</i> ; and (d)an intersection of <i>accessways</i> 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 <i>storey</i> or level other than the entrance <i>storey</i> in a Class 5, 6, 7b or 8 building— (i)containing not more than 3 <i>storeys</i> ; and	
	(ii) with a <i>floor area</i> for each <i>storey</i> , excluding the entrance <i>storey</i> , 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.	
D4D5	Exemptions The following areas are not <i>required</i> to be <i>accessible</i> : (a)An area where access would be inappropriate because of the particular purpose for which the area is used. (b)An area that would pose a health or safety risk for people with a disability. Any path of travel providing access only to an area exempted by (a) or (b).	In our opinion the warehouse component of the building gains an exemption under this clause

5.4 SECTION E – SERVICES AND EQUIPMENT

CLAUSE	CLAUSE REQUIREMENT	ACTION/RECOMENDATION
E4D3	Measurement of distance Distances, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.	Emergency Lighting We recommend engaging a Fire Services Company to review Emergency Lighting provisions within the Warehouse and office areas
E4D4	Design and operation of emergency lighting Every required emergency lighting system must comply with AS/NZS 2293.1.	
E4D5	Exit signs An exit sign must be clearly visible to persons approaching the exit, and must be installed on, above or adjacent to each— (a)door providing direct egress from a storey to— (i)an enclosed stairway, passageway or ramp serving as a required exit; and (ii)an external stairway, passageway or ramp serving as a required exit; and (b)door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and (c)horizontal exit; and (d)door serving as, or forming part of, a required exit in a storey required to be provided with emergency lighting in accordance with E4D2.	Exit and Directional Signage Exit signage is required - above the stairs within the first floor portion of the office - To the external doors from the office area Additional Directional Signage is required within the warehouse Where an Exit sign is not directly visible a Directional sign should be provided to clarify the paths of egress within the building
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 required exit sign must— (a)comply with— (i)AS/NZS 2293.1; or (ii)for a photoluminescent exit 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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