17 September 2024

Williams River Steel 25 Old Punt Road Tomago NSW 2322

Attention: Kris Webb

Dear Kris,

Re: Building Code of Australia 2022 – Assessment Report

29 Grey Street Clarence Town NSW 2321 - Retail and Residential Development

McCarthy Consulting Group (NSW) Pty Ltd (MCG) have been engaged by Williams River Steel as the Building Code Consultant to review the proposed bar, dining and function centre at 29 Grey Street Clarence Town NSW.

The intention of this report is to provide a compliance review to accompany the development application submission to Council. This report is a compliance review to identify all key compliance relates items to be addressed in the design development documentation for lodgement.

Should you have any questions or wish to discuss please do not hesitate to contact the undersigned.

Kind Regards,

Brett Taylor

Building Surveyor - Unlimited (BDC0899)

McCarthy Consulting Group (NSW) Pty Ltd

# BUILDING CODE OF AUSTRALIA 2022 ASSESSMENT REPORT:

### PROPOSED BAR, DINING AND FUNCTION CENTRE

Location: 29 Grey Street Clarence Town NSW

Prepared by: McCarthy Consulting Group (NSW) Pty Ltd

Client: Williams River Steel

**Date of Report:** 17/09/2024

REVISION	DATE	STATUS	APPROVED
Ø	17/09/2024	BCA Compliance assessment	BAT
		report	

### Introduction

McCarthy Consulting Group (NSW) Pty Ltd have conducted a compliance review of the Architectural Plans referenced in the documentation reviewed table below as prepared by Williams River Steel. These drawings are for a proposed bar, dining & function centre and associated carparking.

This assessment has been undertaken against the requirements of the Deemed-to-Satisfy (DtS) provisions of the Building Code of Australia 2022 (BCA22).

This review seeks to identify matters relating to compliance with the BCA 2022 and identify aspects of the design that may require further updating / alterations as design develops prior to lodgement of the development application.

### **Building Characteristics**

The following Building Characteristics have been determined based on the current level of design documentation as referenced in the documentation reviewed table below.

Building Use Classification		
BCA Classification	Class 6	
(A6 - Classifications		
Rise in storeys	2	
Number of storeys	2	
Type of construction	Type C	
Floor area	Ground Floor - 1130 <sup>m2</sup>	
	First Floor – 80 <sup>m2</sup>	
Climate Zone	2	
Building Importance Level	2	

### **Legislative Framework**

This review has been undertaken against the provisions of BCA 2022 and the Disability (Access to Premises - Buildings) Standard 2010.

<b>Current Legislation</b>	Date of Publication	Comments
National Construction Code,	2022	Including editions of
Building Code of Australia Volume 1	Adopted 1 <sup>st</sup> May 2023	standards referenced therein.
Disability (Access to Premises –	2010	To the extent this standard
Buildings) Standard		applies to new developments

### **Scope & Limitations**

The following limitations apply to this assessment:

- The drawings are assessed to the extent available to identify current design compliance issues that are apparent from a desktop review of the drawings.
- The assessment does not consider the requirements for people with disabilities under the provisions of the Disabilities Discrimination Act 1992.
- The assessment does not consider the requirements of legislation other than that required under the Environmental Planning and Assessment Act 1979, i.e. Occupational Health and Safety, Safety in Design etc.
- Generally, this assessment will not detail requirements of the referenced Australian Standards; it is assumed the relevant design disciplines will advise where their proposed designs do not achieve absolute compliance.
- Excluded from our assessment are any comments in relation to other Authorities including: Occupational Health and Safety Legislation; Water, Drainage, Gas and Electrical Supply Authority; Telecommunications; Work Cover Authority, Traffic Management and Town Planning Assessment.

### **Documentation Reviewed**

## **Assessed Drawings prepared by Williams River Steel**

Name	Number	Revision	Date
Title Page	A00	4	31/07/2024
Site Analysis Plan	A01	4	31/07/2024
Channel re-direction	A02	4	31/07/2024

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Site Plan	A03	4	31/07/2024
Proposed Floor Plan	A04	4	31/07/2024
Mezzanine and Roof Plan	A05	4	31/07/2024
Ceiling Plan	A06	4	31/07/2024
Elevations	A07	4	31/07/2024
Sections – Sheet 1	A08	4	31/07/2024
Sections – Sheet 2	A09	4	31/07/2024
Glazing Schedule	A10	4	31/07/2024
Amenities Plan - Restaurant	A11	4	31/07/2024
Amenities Plan – Function Room	A12	4	31/07/2024
Landscape Plan	A18	4	31/07/2024
Licenced Area Plan	A19	4	31/07/2024
Parking Details – Sheet 1	A20	4	31/07/2024
Parking Details - Sheet 2	A21	4	31/07/2024
Access Driveway Details	A22	4	31/07/2024
Sediment & Erosion Plan	A99	4	31/07/2024
Street & Parking Analysis	A100	4	31/07/2024
Flooding Information	A102	4	31/07/2024
Winter Shadow Diagrams	A103	4	31/07/2024

## Fire Services, Installations and related requirements

Based on the current level of detail on the above referenced plans, a DtS compliant building would be required to be provided with the following special fire services and equipment. Where there are departures from the DtS provisions of BCA and the referenced standards the relevant disciplines within the design team are requested to advise of the nature of the proposed departure.

Fire Safety Installation	BCA 2022 Reference	Australian Standard
Emergency Lighting	BCA Clause E4D2, E4D4	AS 2293.1-2018
Exit Signs	BCA Clause E4D5, E4D6, E4D8	AS 2293.1-2018
Fire Hose Reels	BCA Clause E1D3	AS2441-2005
Fire Hydrant Systems	Street reticulated system coverage to be confirmed	AS2419.1-2021
Portable Fire Extinguishers	BCA Clause E1D14	AS2444-2001

# BCA 2022 REGULATORY REVIEW ASSESSMENT – CLAUSES NOT APPLICABLE TO THE SUBJECT BUILDING HAVE BEEN OMITTED FROM THIS ASSESSMENT OR NOTED AS 'NOT APPLICABLE'.

Section A – Governing		
BCA 2022 Clause	Comments	Actions
A2G1 – Compliance	Performance requirements are satisfied by achieving compliance by a Performance Solution, a Deemed-to-Satisfy Solution (DtS), or a combination of 1 & 2.	To be noted for the development of the required performance solutions.
A2G2 – Performance Solutions	A performance solution is achieved by demonstrating compliance with all relevant Performance Requirements, or the solution is at least equivalent to the Deemed-to-Satisfy Provisions. This provision also outlines the required Assessment Methods that the performance solution must use (either one or a combination of) to demonstrate compliance	To be noted for the development of the required performance solutions.
A5G3 – Evidence of suitability – Volumes One and Two (BCA)	Evidence to support that the use of a material, product, form of construction or design meets a Performance Requirement or a DtS provision is to be by way of either a codemark certificate, certificate of accreditation, report from an accredited testing laboratory, report from a professional engineer, documentary evidence by way of Product Technical Statement or evidence to support that a calculation compliance with an ABCB protocol.	Note
A6G1 – Determining a building classification	The classification of a building or part of a building is determined by the purpose for which it is designed, constructed or adapted to be used. Each part of a building must be classified according to its purpose and comply with all the appropriate requirements for its classification.  Unless another classification is suitable, an occupiable outdoor area must have the same classification as the art of the building to which it is associated.	Note
	Note: where a part of a building has been designed, constructed or adapted for a different purposed and is less than 10% of the floor area of the storey it is situated on, the classification of the other part of the storey may apply to the whole storey.	
A6G6, A6G7, A6G11 - Building Classification	The building comprises the following use: Ground Floor - Class 6	Note

	First floor – Class 5/7b/10a	
A6G12 – Multiple classifications	A building (or part of a building) may be designed, constructed or adapted for multiple purposes and have more than one classification.	Note

Section B - Structure		
BCA 2022 Clause	Comments	Actions
B1D2 - Resistance to actions	The resistance of the buildings structure must be greater than the most critical action effect resulting from different combinations of actions where:	Provide a coordinated Construction Issue structural design set along with a design statement.
	<ul><li>(a) the most critical action effect on a building or structure is determined in accordance with B1D3 and the general design procedures contained in AS/NZS 1170.0; and</li><li>(b) the resistance of a building or structure is determined in accordance with B1D4</li></ul>	Statement.
	Professional Engineer to develop structural building solution in compliance with BCA referenced standards.	
	Design Certificate to be provided by Structural Engineer together with Structural details with Construction Certificate application.	
B1D3 - Determination of	Professional Engineer to develop structural design solution.	Confirmation is required as to the parts
individual actions	Design Certificate to be provided by Structural Engineer.	and components in accordance with
	Design team to pay particular to requirements for parts and components with the building to be designed with consideration for seismic actions under AS1170.4 -2007 Earthquake actions (incorporating amendment 1 & 2) and components of the building design that must comply with AS1170.4-2007. We suggest the project Structural Engineer lead discussions on achieving design compliance with these structural standards.	AS1170.4-2007 having been designed by the structural engineer including internal partitions, ceilings, ductwork, light fittings, battens, screens etc.
	BCA Importance Level 2	
	The Guide to the NCC suggests this building to fit within structures that must be designed to importance level of 2.	
	Structural Engineer to note and confirm accuracy of Importance Level determined.	

B1D4 - Determination of structural resistance of materials and forms of construction	The structural resistance of materials and forms of construction must be determined in accordance with the relevant Australian Standards in accordance with Clause B1D4 of the BCA. Professional Engineer to develop structural building solution.  Design Certificate to be provided by Structural Engineer.	Structural Engineers design certificate to be provided as part of the CC application.
B1D5 – Structural software	Structural software used by engineering consultants must comply with the ABCB protocol for Structural Software.	Note
B1D6 – Construction of buildings in flood hazard areas.	Noted	Details to be provided
Specification 4 Design of buildings in cyclonic areas	Not Applicable	Not Applicable

Section C – Fire Resistance		
BCA 2022 Clause	Comments	Compliance
Part C2 – Fire Resistance	and Stability	
C2D1	Note	
C2D2 – Type of Construction	Type C.	Note Type C construction
C2D3 – Calculation of rise in storeys	Rise in storeys of 2	Note
C2D4 – Buildings of Multiple classifications	In a building of multiple classifications such as this, the type of construction required for the building is the most fire resisting type resulting from the application of Table C2D2 on the	Not Applicable

	basis that the classification applying to the top storey applies to all storeys. Note Type C construction applies.	
C2D5 – Mixed types of construction	Not Applicable. Whole building is Type C Construction	Note
C2D6 – Two Storey Class 2, 3 or 9c buildings	Not applicable	Not Applicable
C2D7 – Class 4 parts of buildings	Not applicable	Not Applicable
C2D8 – Open spectator stands and indoor sports stadiums	Not applicable	Not Applicable
C2D9 – Lightweight construction	Not applicable – the documentation at present does not appear to include any lightweight fire rated elements.	Note
C2D10 – Non-combustible building elements	Type C Construction	Not Applicable
C2D11 - Fire hazard properties	The fire hazard properties of the nominated internal linings, materials and assemblies within a Class 2 to 9 building must comply with Specification 7.	Refer to Specification 7 for specific properties and testing regime.
Refer Specification 7	<b>Fire hazard properties:</b> The following properties of a material or assembly that indicate how they behave under specific fire test conditions:	
	<ul> <li>a) Average specific extinction area, critical radiant flux and Flammability Index, determined as defined in Schedule 1.</li> <li>b) Smoke-Developed Index, smoke development rate and Spread-of-Flame Index, determined in accordance with Specification 3.</li> <li>c) Group number and smoke growth rate index (SMOGRARC), determined in accordance with Specification 7.</li> </ul>	

C2D12 - Performance of external walls in fire	Not Applicable	
C2D13 – Fire protected timber concession	Not Applicable	
C2D14 – Ancillary Elements	Ancillary element means an element that is secondary to and not an integral part of another element to which it is attached.	Not Applicable
	An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is one of the following:	
	(a) An ancillary element that is non-combustible (ie tested to AS1530.1).	
	(b) A gutter, downpipe or other plumbing fixture or fitting.	
	(c) A flashing.	
	(d) A grate or grille not more than 2m <sup>2</sup> in area associated with a building service.	
	(e) An electrical switch, socket-outlet, cover plate or the like.	
	(f) A light fitting.	
	(g) A required sign.	
	(h) A sign other than one provided under (a) or (g) that—	
	(i) achieves a group number of1 or2; and	
	(ii) does not extend beyond one storey; and	
	(iii) does not extend beyond one fire compartment; and	
	(iv) is separated vertically from other signs permitted under (h) by at least2 storeys.	
	(i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that—	
	(i) meets the requirements of Table 4 of Specification C1.10 as for an internal element; and	
	(ii) serves a storey—	

		<u></u>
	(A) at ground level; or	
	(B) immediately above a storey at ground level; and	
	(iii) does not serve an exit, where it would render the exit unusable in a fire.	
	(j) A part of a security, intercom or announcement system.	
	(k) Wiring.	
	(I) Waterproofing material installed in accordance with AS4654.2 and applied to an adjacent floor surface, including vertical upturn, or a roof surface.	
	(m) Collars, sleeves and insulation associated with services installations.	
	(n) Screens applied to vents, weepholes and gaps complying with AS3959.	
	(o) Wiper and brush seals associated with doors, windows or other openings,	
	(p) A gasket, caulking, sealant or adhesive directly associated with(a) to (o).	
C2D15 – Fixing bonded laminated cladding panels	Not Applicable – the proposed works does not appear to include any bonded laminated cladding panels.	Not Applicable
C3 – Compartmentation a	and Separation	
C3D1	Note	
C3D2 – Application of Part	Note	Note
C3D3 - General Floor Area Limitations	Note	Design Complies
C3D4 - Large isolated buildings	Not Applicable	
C3D5 - Requirements for open spaces and vehicular access	Not Applicable	
NSW C3D6(3) – Class 9 buildings	Not Applicable	Project Peferones: 24062

C3D7 – Vertical separation of openings in external walls.	Not Applicable to Type C Construction	Not Applicable
C3D8 – Separation by fire walls	Not Applicable – No fire walls required within this project.	Not Applicable
C3D9 – Separation of classifications in the same storey	If a building has parts of different classifications located alongside one another in the same storey, each building element in that storey must have the higher FRL prescribed in Specification 5 for that element for the classifications concerned, or the parts must be separated in that storey by a fire wall.	Not applicable – fire walls are not required for compliance with BCA on this development.
C3D13 – Separation of equipment	The following equipment must be separated from the remainder of the building by 2hr fire rated construction:  - Lift motors and lift control panels (except a lift installation without a machine-room) or  - Emergency generators used to sustain emergency equipment operating in the emergency mode; or  - Central smoke control plant; or  - Boilers; or  - A battery system installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200kWh or more	TBC
C3D14 - Electricity supply system	A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must be separated from any other part of the building by 2hr fire rated construction with self-closing doors -/120/30 FRL.	Not Applicable
C4 – Protection of Openir	ngs	
C34D2 – Application of Part	Part applies	Note
C4D3 – Protection of openings in external walls	No openings within 3m from a side or rear boundary	Design Complies

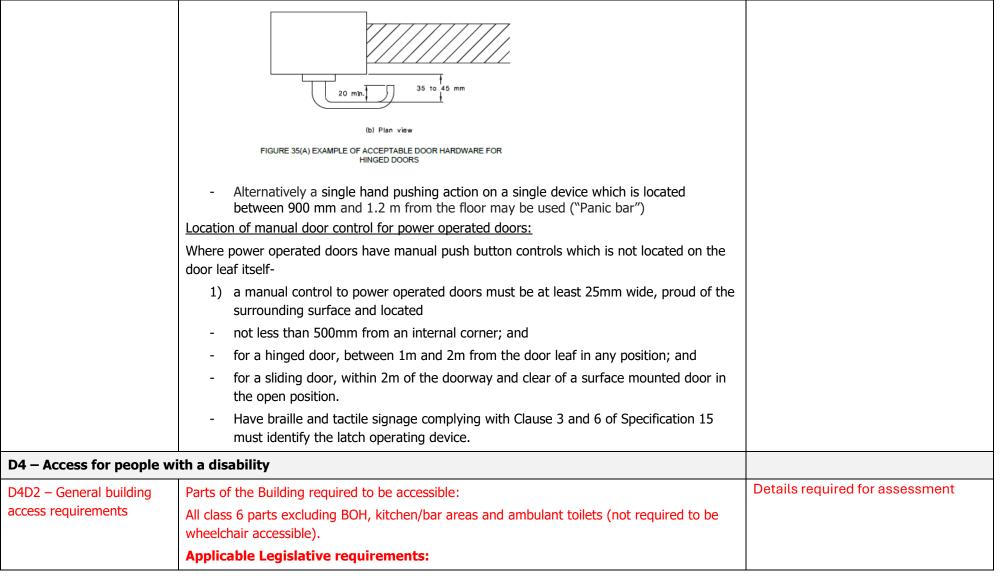
C4D4 – Separation of external walls and associated openings in different compartments	Not Applicable – no separation of fire compartments required.	Note
Specification 5 – Fire- Resisting Construction		Design complies
Specification 6 – Structural tests for lightweight construction	Not Applicable	
Section D – Access and Eq	gress	
BCA 2022 Clause	Comments	Compliance
D2 – Provision for Escape		
D2D2 – Application of Part	Applies to this building	
D2D3 – Number of exits required	A minimum of 2 exits are required for each storey above ground of the building as less than 25m in effective height.	Design complies with this requirement
D2D5 – Exit Travel Distances	Note	Design capable of complying – required exits to be noted on floor plan
D2D6 – Distances between alternative exits	Travel distance between alternative exits must not exceed 60m between the exits.	Design capable of complying – required exits to be noted on floor plan
D2D7 – Height of exits, paths of travel to exits and doorways	In a required exit or path of travel to an exit the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm.	Design complies
D2D8 – Widths of exits and paths of travel to exits	The unobstructed width of each requirement exit or path of travel to an exit must be not less than 1m and for the purposes of egress only not less than 750mm through and openable door.	Design appears capable of complying.

		Note this minimum 1m is measured clear of obstructions and between handrails in a stairway.
D2D9 – Width of doorways in exits or paths of travel to exits	As this is a class 6 building, the unobstructed width of a doorway in a requirement exit or path of travel to an exit must be not less than 750mm.  Note under Part D4, the clear width is increased to 850mm for unit entry doors and all doors and gates within the common areas, retail and basement for accessibility requirements.	Door schedule to be provided for assessment, noting that the minimum widths apply to the active leaf of an double door sets
D2D10 – Exit width not to diminish in direction of travel	The unobstructed width of a required exit must not diminish in the direction of travel to a road or open space, except where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i).	Design appears capable of complying.
D2D11 – Determination and measurement of exits and paths of travel to exits	For the purposes of D2D7 to D2D10 the following apply:  The required width of a stairway or ramp in a required exit or path of travel to an exit must—  (i) be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; and  (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.  To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18.	Noted
D2D15 – Discharge from exit	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.  Where a required exit leads to an open space, the path of travel to the road must have an unobstructed width throughout not less than 1m or the minimum width of the required exit (in this case, 1m).	Design Capable of complying
D2D16 – Horizontal Exits	Not applicable	Not Applicable

D2D18 – Number of persons accommodated	The number of persons accommodated in a building can be based on a floor area ratio, seating capacity or any other suitable means of assessing capacity.  Assessment has been based on the nominated seating layout of 254 persons + 183 persons in outdoor spaces including the beer garden – Total 337 persons + staff	Noted Assessed numbers TBC
D2D19 – Measurement of distances	The nearest part of an exit means in the case of a fire isolated stairway, the nearest part of the doorway providing access to them.  In the case of a doorway opening to a road or open space, the nearest part of the doorway.	Note
D2D20 – Method of Measurement	Applies	Note
D3 Construction of Exits		
D3D2 – Application of Part		Design complies
D3D3 – Fire isolated stairways and ramps	Not Applicable – exits not required to be fire isolated.	Not Applicable
D3D4 – Non fire isolated stairways and ramps	The non-fire isolated stair must be of non-combustible construction or only of reinforced concrete or steel that in not part is less than 6mm thick, or timber that has a finished thickness of not less than 44mm and an average density of not less than 880kg/m3 at a moisture content of 12%.	Details TBC
D3D8 – Installations in exits and paths of travel	Any electrical distribution boards, communications cupboards or electrical installations located in the path of travel to an exit must be enclosed in non-combustible construction and have any opening suitably smoke sealed.	Location to be provided for assessment
D3D14 – Going and risers	The goings and risers are to be consistent in height with a tolerance not greater than 5mm between adjacent goings or risers and not more than 10mm over the entire flight.  The treads must have a slip resistant surface or nosing achieving a P3 rating or higher when tested in accordance with AS4586 for the internal stairs and P4 or higher for the external stairs.	Stair geometry to be provided for assessment.

	Table D3D14: R	stairways are only those within the class 2 SOU's.  Table D3D14: Riser and going dimensions						
	Stairway location	Riser (R)		Going (G) <sup>Note 3</sup>		Quantity	(2R + G)	
		Max	Min	Max	Min	Max	Min	
	Public	190	115	355	250	700	550	
	Private Note 1	190	115	355	240	700	550	
		R	G		R			
	The going in tapered terraces is measured a) 270 mm in a stairway is I b) 270 mm from wide or n	d— from the oute ess than 1 m m each side (	er side of th wide (app	e unobstruct licable to a no	ed width	of the stairw d stairway o	ray if the only); and	
22 – Handrails	A handrail is require 2009. Handrails must nosing of stairs or re	st be located			_			Note

D3D23 – Fixed platforms, walkways, stairways and ladders.	Not Applicable	Note
D3D24 – Doorways and doors.	Doorways forming a required exit or part of a required exit if fitted with a door which is power operated, it must be able to be opened manually under a force of not more than 110N if there is a malfunction or failure of the power source and if it leads directly to a road or open space, it must open automatically if there is a power failure to the door or on the activation of a fire alarm anywhere within the fire compartment.  A power operated door in a path of travel to a required exit must be able to be opened manually under a force of not more than 110N if there is a malfunction or failure of the power source.	Building capable of complying
D3D25 – Swinging doors	A swinging door in a required exit or forming part of a required exit must not encroach—  (a) 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  (b) when fully open, by more than 100 mm on the required width of the required exit;  (c) The measurement of encroachment in each case is to include door handles or other furniture or attachments to the door.	Required exit doors must swing in the direction of person seeking egress from the building. Exits to be confirmed, noting that al doors are currently indicated as swinging against person seeking egress.
D3D26 – Operation of latch	A door in a required exit, forming part of a required exit or a path of travel to a required exit must be 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 900mm and 1.1m from the floor and if in a part of the building required to be accessible:  - be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and  - 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 35mm and not more than 45mm.	Door furniture schedule to be provide See also part D4.



- 1. Building Code of Australia Volume One 2022 Particularly Part D Access and Egress
- 2. AS1428.1 (2009) Design for Access and Mobility
- 3. AS1428.4.1 (2009) Tactile Indicators
- 4. AS4586 Slip Resistance of Pedestrian Surface
- 5. Premises Standards Disability Discrimination Act 1992 (Outside scope of report however noted to complement BCA requirements)

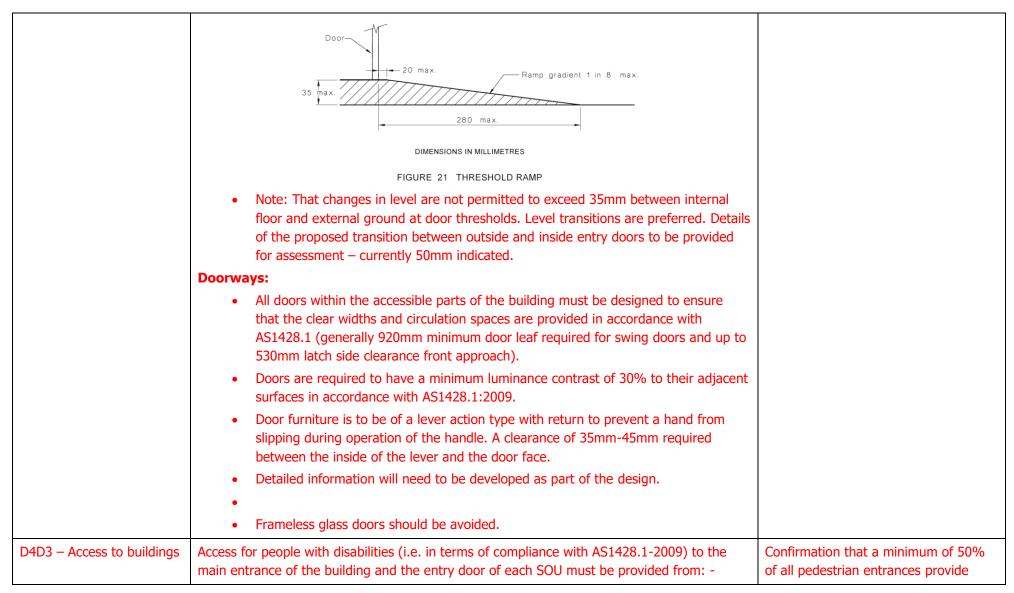
### **General Requirements as Follows:**

## **Glazing:**

- Glazing that may be mistaken for an opening shall be provided with manifestation in accordance with AS1288 and AS1428.1:2009.
- Glass doors and glazing capable of being mistaken for an opening are to be clearly
  marked with a solid contrasting strip a minimum 75mm wide with the lower edge
  located at a height of 900 1000mm above FFL.
- Strip must achieve 30% luminous contrast to the background against which it is viewed.

### **Entry Threshold:**

• Design of the building's entry thresholds is to be in accordance with AS1428.1:2009 with either a flush transition or Clause 10.5 & FIGURE 21 THRESHOLD RAMP (pages 32-33).



	<ul> <li>The main points of a pedestrian entry at the allotment boundary</li> <li>Accessible carparking spaces in basement.</li> </ul>	compliant accessible paths of travel into the building required
D4D4 – Parts of buildings to be accessible	All stairs and ramps (other than fire isolated stairs and ramps) must comply with AS1428.1-2009 and tactile ground surface indicators to AS1428.4.1-2009. Handrails required to both sides of all stairs.	Details required to be updated to reflect compliance.
	Ensure all stairways are provided with 30% luminance contrasting stair nosing's that comply with AS1428.1-2009.	Door schedule to be provided to demonstrate the required 30%
	Design team to note BCA DtS requirement for carpet pile heights and underlay in accessible parts of the buildings overrule that within AS1428.1-2009:	luminance contrast to all accessible doors.
	<ul> <li>Maximum underlay thickness – 4mm</li> <li>Maximum pile thickness – 11mm</li> <li>Total carpark and underlay thickness – 15mm.</li> <li>All doors in accessible areas of the building must achieve a clear opening of 850mm, we find this requires a minimum 920mm door leaf to be documented in order to achieve the required clearance.</li> <li>Possible compliant issues: -         <ul> <li>Accessible path of travel to the beer garden,</li> <li>50% of pedestrian entrances provided with an accessible path of travel – noting stair access off Grey Street,</li> <li>Compliant access must be provided form the allotment boundary through the principal entrance of the building – noting stair access off Grey Street.</li> </ul> </li> </ul>	Possible conflict in achieving compliant handrail termination at bottom of the stair and the adjacent doorway serving the first floor
D4D5 - Exemptions	<ul> <li>The following areas are not required to be accessible:</li> <li>An area where access would be inappropriate because of the particular purpose for which the area is used.</li> <li>An area that would pose a health or safety risk for people with a disability.</li> <li>Any path of travel providing access only to an area exempted above.</li> </ul>	Generally all areas should be documented as accessible under the base building application.

	Whilst access for persons with disabilities is generally required throughout the building to all areas normally used by the occupants, given the specialist nature of parts, there may be areas subject to exemption under D4D5 such as the BOH, kitchen/bar areas and ambulant toilets (not required to be wheelchair accessible).  The design team/client will be requested to identify areas they wish to apply BCA D4D5 exemption to and provide sufficient documented reasons stating why it is not appropriate to provide people with disabilities access to a particular area where an exemption is being sought.	
D4D6 – Accessible car parking	Dedicated accessible carparking spaces (DAPS) are required at the ratio specified under BCA D4D6 for the class 6 retail use:  • 1 DAPS for every 50 carspaces up to 1000 spaces	Design complies
D4D7 - Signage	Exit doors provided with an exit sign are required to have braille and tactile signage: 'Exit Ground Floor' (example below). The sign is to be installed in accordance with Specification 15.	Signage to be nominated to the exit door from each non fire isolated stair and the lobby.
	Exit Level 3	Provide signage schedule / details with CC application package
D4D8 – Hearing Augmentation	Confirmation whether an inbuilt amplification system is proposed as part of these works on the electrical design.	Details to be provided for assessment
D4D9 – Tactile Indicators	The building is required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching—	Note
	<ul><li>a) a stairway, other than a fire-isolated stairway; and</li><li>b) an escalator; and</li><li>c) a passenger conveyor or moving walk; and</li></ul>	

	<ul> <li>d) a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; and</li> <li>e) in the absence of a suitable barrier— <ul> <li>(i) an overhead obstruction less than 2 m above floor level, other than a doorway; and</li> <li>(ii) an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D4D5, if there is no kerb or kerb ramp at that point, except for areas exempted by D4D5.</li> </ul> </li> </ul>	
D4D10 – Wheelchair seating spaces in Class 9b assembly buildings	Not Applicable	Not Applicable
D4D13 – Glazing on an accessway	Glazing on accessways must be provided with manifestation marking to comply with AS1428.1-2009 requirements.  This means a solid non-transparent band, not less than 75mm thick and extending the full width of the panel. The band must start between 900mm-1000mm above FFL and not have any cutouts within. The band is to achieve a minimum 30% luminance contrast between the band and the flooring surface to which it is viewed, measured 2m back from the glazing line.	Decals to be provided to all full height glazing not provided with transom or similar. Refer Clause 6.6 of AS1428.1-2009.
Specification 14 – Non required stairways, ramps and escalators	Noted	
Specification 15 – Braille and tactile Signs	Specific requirements for the selection and location of signage to accessible facilities, critical issues identified below:  • Braille and tactile components of signs to be located 1200-1600mm above floor level • Signs with single lines of characters must have the line of tactile characters 1250-1350mm above floor level	Architect to note regarding location of braille and tactile signage.

Signs should be located on the wall, latch side of the door with the leading edge of the sign 50-300mm of the door frame (where this is not possible it may be placed on the door itself). Signs themselves: BCA has prescriptive requirements for height, location and size of text Sign must have rounded edges Sign background/fill space must be low sheen The background or a border with a minimum thickness of 5mm must achieve 30% luminous contrast to the surface on which it is mounted. Leading edge to be between 50mm and 300mm from architrave Only where it is not possible to place on Signs with single lines of characters must wall may sign have the line of tactile characters between be installed to 1250mm and 1350mm above the floor or the face of the ground surface. FLOOR Unisex Toilet LH FLOOR Specification 16 – Accessible water entry/exit for swimming pools Not Applicable Section E – Services and Equipment **BCA 2022 Clause Comments Compliance E1 – Fire Fighting Equipment** 

E1D2 – Fire hydrants	Hydrant system required for building in excess of 500m <sup>2</sup> .	Hydraulic consultant to confirm whether compliant street coverage is available
E1D3 – Fire Hose Reels	Applicable – Fire hose reels required to the building.  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 storey at which they are located, except a sole-occupancy unit of not more than 2 storeys 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 sole-occupancy unit provided the fire hose reel can provide coverage to the whole of the sole-occupancy unit.  Fire hose reels must be located internally, externally or in combination, to achieve the system coverage specified in AS 2441  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 exit), 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 exit, except that a fire hose reel need not be located adjacent to every exit, provided system coverage can be achieved. 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 exit to achieve the required coverage.	Design of the fire hose reel system to BCA E1D3 and AS2441-2005.
E1D14 – Portable fire extinguishers	Portable fire extinguishers must be provided to serve the in accordance with Sections 1, 2, 3 and 4 of AS 2444.	Portable fire extinguishers to be provided in accordance with BCA E1D14 and AS2444-2001.

	Class 6/7 buildings (except within sole-occupancy units of a Class 9c building), portable fire extinguishers must be provided as follows:  a) To cover Class AE or E fire risks associated with emergency services switchboards b) To cover Class F fire risks involving cooking oils and fats in kitchens. c) To cover Class B fire risks in locations where flammable liquids in excess of 50 litres	Fire services consultant to review locations of PFE in retail tenancy to ensure location complies with AS2444-2001.
	<ul> <li>are stored or used (not including that held in fuel tanks of vehicles).</li> <li>d) To cover Class A fire risks in normally occupied fire compartments less than 500 m² not provided with fire hose reels (excluding open-deck carparks).</li> <li>e) To cover Class A fire risks in classrooms and associated corridors in primary and secondary schools not provided with fire hose reels.</li> <li>f) To cover Class A fire risks associated with a Class 2, 3 or 5 building or Class 4 part of a building.</li> </ul>	
E1D16 – Fire precautions during construction.	The builder should note during construction not less than one fire extinguisher to suite Class A, B and C fire risks are required for each storey located adjacent to each exit.	Capable of complying – builder to action.
E2 – Smoke Hazard Management		
E2D2 – Application of Part	Part applies to new areas.	
E2D9 – Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8	Not Applicable	Not Applicable
and 9b buildings		
	gency, exit signs and warning systems	
	gency, exit signs and warning systems  The building requires emergency lighting to comply with BCA cl. E4D2:  Class 6  Throughout the class 6 parts as the storey has an area more than 300 m <sup>2</sup> —	CIRD electrical documentation to reflect compliance.

	<ul> <li>in any room having a floor area more than 100 m² that does not open to a corridor or space that has emergency lighting or to a road or open space; and</li> <li>in any room having a floor area more than 300 m².</li> </ul>		
E4D3 – Measurements of distances	Designer to note method of measurement	Note	
E4D4 – Design and operation of emergency lighting	Emergency lighting shall be provided throughout the building in accordance with the requirements of AS/NZS 2293.1-2018.  Design Compliance certificate (CIRD) to reference compliance with BCA Part E and AS/NZS 2293.1-2018.	Note	
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  (iii) an external access balcony leading to a required exit; and  b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and  c) horizontal exit; and  d) door serving as, or forming part of, a required exit in a storey required to be provided with emergency lighting in accordance with E4D2.	Building capable of complying - Electrical documentation to reflect compliance.	
E4D6 – Direction signs	Where an exit is not readily apparent then exit signs with directional arrows must be installed in appropriate positions in corridors, hallways, lobbies and the like indicating the direction to a required exit.	Building capable of complying - Electrical documentation to reflect compliance.	
E4D8 – Design and operation of exit signs	The design and operation of exit signage must comply with AS/NZS 2293.1-2018  Required exit signs must be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.	CIRD electrical documentation to reflect compliance.	

Specification 19 – Fire	Not Applicable	
control centres		

Section F – Services and Equipment			
BCA 2019 Clause Comments		Compliance	
F1 – Surface water mana	gement, rising damp and external waterproofing		
F1D3 – Stormwater drainage	Stormwater drainage must be designed and constructed in accordance with AS/NZS3500.3-2018.	Hydraulic design to confirm adequate drainage to balconies.	
F1D6 – Damp proofing	Moisture from the ground must be prevented from reaching the lowest floor timbers and the walls above the lowest floor joists and, the walls above the damp-proof course and the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders.	Location of damp roof course must be provided on plan for construction certificate package.	
	The damp-proof course must consist of a material that complies with AS/NZS2904 or impervious sheet material in accordance with AS3660.1.		
F1D7 – Damp-proofing of floors on the ground	Where a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS2870.	Details of vapour barrier must be provided on plan for construction certificate package.	
F1D8 – Subfloor ventilation	Not applicable – slab on ground	Not Applicable	
F2 – Wet areas and overflow protection			
F2D2 – Wet area construction	In a Class 5, 6, 7, 8 or 9 building, building elements in a bathroom or shower room, a slop hopper or sink compartment, a laundry or sanitary compartment must—  a.) be water resistant or waterproof in accordance with Specification 26; and b.) comply with AS 3740,	Applies – architectural documentation to reflect compliance.	
	as if they were in a Class 2 or 3 building or a Class 4 part of a building		

F2D3 – Rooms containing urinals	Wall surface must be impervious 50mm above and 225mm on each side of wall hung urinals with the floor dragged to a floor waste	Building capable of complying	
F3 – Wall and Roof Clado			
F3D2 - Roof covering	Noted.	Architects' details for weatherproofing the roof of the building to reflect compliance.	
F3D3 - Sarking	Noted	Architects' details for wall details to reflect compliance.	
F3D4 – Glazed assemblies	The following glazed assemblies in the external walls must comply with AS2047 requirements for resistance of water penetrations:  • Windows  • Siding and swinging glazed doors with a frame (including bi-folds)  • Adjustable louvers  • Shopfronts  • Window walls with one piece framing	Architects' details provided for the construction certificate package.	
F3D5 – Wall cladding	DTS BCA requires that external wall cladding must comply with one or a combination of the following:  a.) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700.  b.) Autoclaved aerated concrete: AS 5146.3.  c.) Metal wall cladding: AS 1562.1.	Design complies	
F4 — Sanitary and other facilities			
F4D3 – Calculation of number of occupants and facilities	The number or persons accommodated must be calculated according to D2D18 if it cannot be more accurately determined by other means.  In calculating the number of sanitary facilities to be provided under F4D2 and F4D4, a unisex facility required for people with a disability may be counted once for each sex. The unisex	Note.	

	facility comprises one closet pan, one washbasin and means for the disposal of sanitary products.	
F4D4 – Facilities in Class 3 to 9 Buildings Table F4D4a	Except where permitted by sub-clauses (3), (4), (7), F4D5(a), F4D5(b) and F4D12(1), separate sanitary facilities for males and females must be provided for Class 6 buildings in accordance with Tables F4D4a (employees) and F4D4d.  Current design is capable of serving the projected population	The unisex PWD facility counts as a male and female pan and basin.
F4D5 – Facilities for people with disabilities	An accessible sanitary compartment must be provided in the amenities associated with the class 6 part of the building in accordance with AS1428.1-2009.  At each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, not less than one sanitary compartment suitable for a person with an ambulant disability for use by males and not less than one sanitary compartment suitable for a person with an ambulant disability for use by females, each in accordance with AS 1428.1, must be provided. No ambulant toilets are currently indicated.	Design complies
F4D6 – Accessible unisex sanitary compartments	For Class 5, 6, 7, 8 or 9 buildings, where F4D4 requires closet pans USAT must be provided as follows —  (i) 1 on every storey containing sanitary compartments; and  (ii) where a storey has more than 1 bank of sanitary compartments containing male and female sanitary (ii)compartments, at not less than 50% of those banks.	Design complies

F4D8 – Construction of sanitary compartments	Unless there is a clear space of at least 1.2 m, measured in accordance with Figure F4D8, between the closet pan within the sanitary compartment and the doorway, the door to a fully enclosed sanitary compartment must—  a.) open outwards; or b.) slide; or c.) be readily removable from the outside of the sanitary compartment  Construction of sanitary compartments  Clear space  Clear space	WC doors to be removable where applicable. Architect to note on door schedule.
F4D9 – Interpretation: Urinals and washbasins	Noted	
F4D10 – Microbial (legionella) control	Hot water, warm water and cooling water systems in the building must be installed in accordance with AS/NZS 3666.1. Hydraulic consultant to confirm design compliance	Hydraulic consultant to confirm compliance
F5 – Room Heights		
F5D2– Heights of rooms and other spaces.	Room heights are required to comply with minimum dimensions of BCA 2022 as indicated below:  In a Class 2 or 3 building or Class 4 part—  a) a kitchen, laundry, or the like — 2.1 m; and b) a corridor, passageway or the like — 2.1 m; and c) a habitable room excluding a kitchen — 2.4 m; and d) in a room or space with a sloping ceiling or projections below the ceiling line within— a habitable room—	Design complies

	<ul> <li>(aa) in an attic — a height of not less than 2.2 m for not less than two thirds of the floor area of the room or space; and</li> <li>(bb) in other rooms — a height of not less than 2.4 m for not less than two thirds of the floor area of the room or space; and</li> <li>e) a non-habitable room or space within a non-habitable room, with a sloping ceiling or projections below the ceiling line — a height of not less than 2.1m for not less than 2/3rds of the floor area of the room or space.</li> <li>Class 7a part — carparking areas - 2.1m,</li> <li>A corridor, passageway, or the like — 2.1m.</li> </ul>	
F6 — Light and Ventilation	1	
F6D5 - Artificial lighting	<ul> <li>Artificial lighting in required areas to comply with AS1680.0-2009:</li> <li>In required stairways, passageways, and ramps; and</li> <li>In all rooms that are frequently occupied, all spaces required to be accessible, all corridors, lobbies, internal stairways, other circulation spaces and paths of egress.</li> </ul>	Electrical engineer to confirm lighting design complies with AS1680.0-2009.
F6D6 - Ventilation of rooms	All classes:  All habitable rooms, sanitary compartments, office space, workrooms etc. are to be provided with either:  • Natural ventilation complying with F6D7 (i.e. through openings comprising 5% of the floor area of the room to be ventilated), or  • Mechanically ventilated in accordance with AS1668.2 & AS/NZS 3666.1.  Mechanical designer to confirm ventilation means proposed for all occupied rooms in design.	Mechanical Engineer to confirm how each space will be provided with ventilation to comply with minimum requirements of BCA at base building stage.
F6D7 – Natural ventilation	Natural ventilation is an option for achieving BCA compliance. Should the design team wish to pursue natural ventilation as the means of demonstrating compliance with NCC cl. F6D7, evidence to be provided showing the window openings with an area not less than 5% of the floor area of the room being served.	Note

F6D8 – Ventilation borrowed from adjoining rooms.	Not Applicable	Note		
F6D9 – Restriction on location of sanitary compartments	<ul> <li>A sanitary compartment must not open directly into—</li> <li>a kitchen or pantry; or</li> <li>a public dining room or restaurant; or</li> <li>a dormitory in a Class 3 building; or</li> <li>a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand);</li> <li>a workplace normally occupied by more than one person.</li> </ul>	Design complies		
F6D12 – Kitchen local exhaust ventilation	Noted	Mechanical Engineer to confirm compliance with minimum requirements of BCA		
Section G – Ancillary Prov	risions			
BCA 2022 Clause	Comments			
Section J – Energy Efficien	ncy			
BCA 2022 Clause	Comments	Compliance		
Section J – Energy Efficien	Section J – Energy Efficiency			
Part J2-J7 Energy Efficiency	Class 6:  An energy efficiency assessment against BCA 2022 Section J for the class 6 parts is to be prepared and submitted with the construction certificate application package.	Architect to note Section J assessment for class 6 part to be provided.		
BCA 2022 Part J Remainir	BCA 2022 Part J Remaining Matters			
Part J2 – Energy Efficiency				
Part J4 – Building Fabric	Noted			

Part J5 – Building Sealing	Noted	
Part J6 – Air conditioning and ventilation	The mechanical engineer is to provide design confirming the requirements of J6 have been met.	Mechanical Engineers design certificate to include compliance with BCA 2019 Amdt 1 Part J6.
Part J7 – Artificial lighting and power	The electrical engineer is to provide design confirming the requirements of J7 have been met.	Electrical Engineers design certificate to include compliance with BCA 2019 Amdt 1 Part J7.
Part J8 – Heated water supply	A heated water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NSW Volume 3 – Plumbing code of Australia	Hydraulic Engineer design certificate required.
Part J9 – Energy Monitoring and on-site distributed energy resources	To be addressed by electrical consultant and confirmed in design compliance certificate.  Note the provisions of this part do not apply within the SOUs. Applies to overall building.  (1) A building or sole-occupancy unit with a floor area of more than 500m² must have energy meters configured to record the time-of-use consumption of gas and electricity.  (2) A building with a floor area of more than 2,500m² must have energy meters configured to enable individual time-of-use energy data recording, in accordance with (3), of—	Electrical engineer design statement required.
	<ul> <li>(a) air-conditioning plant including, where appropriate, heating plant, cooling plant and air handling fans; and</li> <li>(b) artificial lighting; and</li> <li>(c) appliance power; and</li> <li>(d) central hot water supply; and</li> <li>(e) internal transport devices including lifts, escalators and moving walkways where there is more than one serving the building; and</li> <li>(f) on-site renewable energy equipment; and</li> <li>(g) on-site electric vehicle charging equipment; and</li> </ul>	

	<ul><li>(h) on-site battery systems; and</li><li>(i) other ancillary plant.</li><li>(3) Energy meters required by (2) must be interlinked by a communication system that collates the time-of-use energy data to a single interface monitoring system where it can be stored,</li></ul>	
J9D4 - Facilities for electric vehicle charging equipment	analysed and reviewed.  (1) Subject to (2), a carpark associated with a Class 2, 3, 5, 6, 7b, 8 or 9 building must be provided with electrical distribution boards dedicated to electric vehicle charging—	Electrical engineer input and design required to accompany CC application package.
	<ul><li>(a) in accordance with Table J9D4 in each storey of the carpark; and</li><li>(b) labelled to indicate use for electric vehicle charging equipment.</li></ul>	package.
	(2) Electrical distribution boards dedicated to serving electric vehicle charging in a carpark must—	
	(a) be fitted with a charging control system with the ability to manage and schedule charging of electric vehicles in response to total building demand; and	
	(b) when associated with a Class 2 building, have capacity for each circuit to support an electric vehicle charger able to deliver a minimum of 12 kWh from 11:00 pm to 7:00 am daily; and	
	(c) when associated with a Class 5 to 9 building, have capacity for each circuit to support an electric vehicle charger able to deliver a minimum of 12 kWh from 9:00 am to 5:00 pm daily; and	
	(d) when associated with a Class 3 building, have capacity for each circuit to support an electric vehicle charger able to deliver a minimum of 48 kWh from 11:00 pm to 7:00 am daily; and	
	(e) be sized to support the future installation of a 7 kW (32 A) type 2 electric vehicle charger in—	
	(i)100% of the car parking spaces associated with a Class 2 building; or	

	(ii)10% of car parking spaces a		
	(iii)20% of car parking spaces		
	(f) contain space of at least 36 mm circuit electricity metering to record and		
	(g) be labelled to indicate the use o of metering equipment.		
	Table J9D4: Electric vehicle distribut	tion board requirement for each storey of a carpark	
	Carpark spaces per storey for electric vehicles	Electrical distribution boards for electric vehicle charging per storey	
	0 - 9	0	
	10 - 24 25 - 48	1	
	49 - 72	3	
	73 - 96	4	
	97 - 120	5	
	121 - 144	6	
	145 - 168	7	
J9D5 - Facilities for solar photovoltaic and battery systems	The main electrical switchboard of a building must contain at least two empty three-phase circuit breaker slots and four DIN rail spaces labelled to indicate the use of each space for – i)		Electrical engineer input and design required to accompany CC application package.

### **Accessibility Provision Summary**

### Signage

Braille and tactile signage is required in accordance with BCA Specification D3.6. See following summary of issues for location and type of signage.

Accessible common sanitary facilities are required to be provided with tactile signage to satisfy D3.6 of the BCA. Signage must also indicate if the facilities are for left or right-handed transfer to the pan (example sign from AS1428 below).



Note requirements in BCA D3.6 for braille and tactile signage to all required exit doors provided with an exit sign per E4.5 and state:

"Exit"; and "Level" followed by the floor number

# Exit Level 4

MCG request a statutory signage package be provided as part of the Building Approval application set.

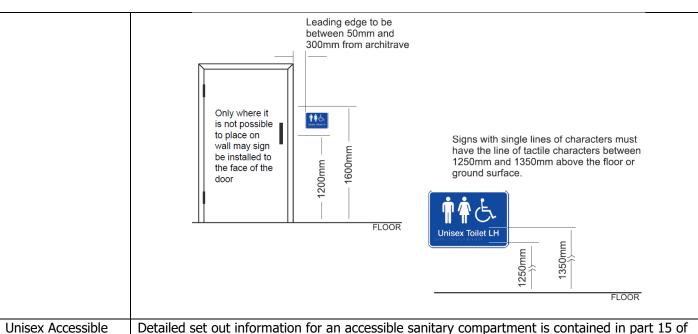
# BCA Specification D3.6 – Braille and Tactile Signs

Specific requirements for the selection and location of signage to accessible facilities, critical issues identified below:

- Braille and tactile components of signs to be located 1200-1600mm above floor level
- Signs with single lines of characters must have the line of tactile characters 1250-1350mm above floor level
- Signs should be located on the wall, latch side of the door with the leading edge of the sign 50-300mm of the door frame (where this is not possible it may be placed on the door itself).

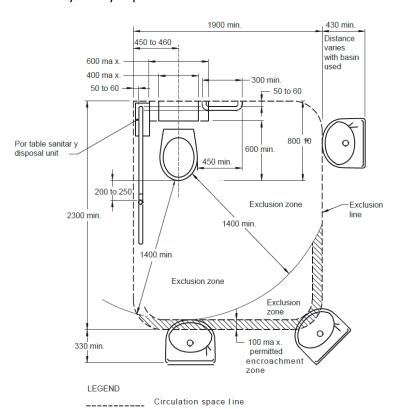
### Signs themselves:

- BCA has prescriptive requirements for height, location and size of text
- Sign must have rounded edges
- Sign background/fill space must be low sheen
- The background or a border with a minimum thickness of 5mm must achieve 30% luminous contrast to the surface on which it is mounted.



Amenities Setout

Detailed set out information for an accessible sanitary compartment is contained in part 15 of AS1428.1-2009. Summary of key aspects is below:



NOTE: This circulation space may overlap any other circulation spaces specified in this Standard.

DIMENSIONS IN MILLIMETRES

FIGURE 43 CIRCULATION SPACE FOR WC PAN—RIGHT-HAND TRANSFER (LEFT-HAND TRANSFER IS MIRROR REVERSED)

