purple apple access

Access Report

Proposed Childcare Centre
27 Steam Street
MAITLAND NSW 2320

For: Brown Commercial Building
Ref: PAA_25163

Document Control

This report has been prepared based on the documentation available and time allocated to conduct the review. All reasonable attempts have been made to identify key compliance matters.

Revision Summary:

prepared by:			
Catherine Walker	Draft	Issued for review	27 May 2025
Catherine Walker	Rev 1	Issued for Council submission	10 June 2025

Contact Details:

Lindsay Perry Access Pty Ltd t/a **purple apple access**
PO Box 453 NEW LAMBTON NSW 2305

Lindsay Perry
lindsay@purpleapple.au
0418 909 180

Jane Bryce
jane@purpleapple.au
0411 619 966

Lee-May Whong
lee@purpleapple.au
0457 784 328

Catherine Walker
catherine@purpleapple.au
0400 450 808

Copyright:

Clarifications:

This report is limited to items within drawings listed in this report only.

Construction is to be in accordance with the recommendations made in this access report to ensure compliance.

Any dimensions quoted throughout this report and within Australian Standards are CLEAR dimensions, not structural. This needs to be considered during construction to account for wall linings and the like.

Definitions:

The following terminology has been used throughout this report:

Compliant | compliance with current accessibility legislation has been achieved
Compliant Configuration | circulation and spatial planning requirements are compliant
Capable of compliance | compliance is achievable through detailed design
Not Yet Compliant | circulation and spatial planning requirements have not yet been met
To be addressed during detailed design | details not available or applicable at DA stage
To be confirmed | inadequate information is provided to determine compliance

Executive Summary

Development application documentation for the Maitland Childcare Centre located at 27 Steam Street, Maitland, has been reviewed against current accessibility legislation.

The following table summarises our findings.

Item No.	Description	Compliance Status
The Disability (Access to Premises) Standards		
6.1	Access Code	Refer BCA commentary
6.2	New Work & The Affected Part	Not applicable
CCPG Access for People with Disabilities		
7.1	C16 Access for People with Disabilities	Compliant
BCA | Access and Approach		
8.1	Allotment Boundary to Entrance	Capable of compliance
8.2	Accessible Carparking to Entrance	Compliant configuration
8.3	Accessways (Pathways Generally)	Compliant
8.4	Accessible Carparking	Compliant
8.5	Kerb Ramps	Compliant configuration
8.6	Stairs	Compliant configuration
8.7	Walkways	Capable of compliance
8.8	Threshold Ramps	Capable of compliance
8.9	Accessible Entrance	Compliant configuration
8.10	Tactile indicators at entrance	Not required
8.11	Non-accessible entrance	Not applicable
8.12	Gates	Capable of compliance
BCA | Interior		
9.1	Extent of Access Generally	Capable of compliance
9.2	Circulation Areas	Compliant
9.3	Doorways	Capable of compliance
9.4	Hearing augmentation at Service Counters	To be addressed during detailed design
9.5	Hearing Augmentation	To be addressed during detailed design
9.6	Exempt Areas	Noted
9.7	Floor Finishes	To be addressed during detailed design
9.8	Carpet	To be addressed during detailed design
9.9	Controls	To be addressed during detailed design
9.10	Visual Indication to Glazing	To be addressed during detailed design
9.11	Tactile Indicators	To be addressed during detailed design
9.12	Signage	To be addressed during detailed design
BCA | Sanitary Facilities		
10.1	Distribution	Compliant configuration
10.2	Accessible Toilets	Compliant configuration
10.3	Ambulant Toilet Cubicles	Capable of compliance
BCA | Vertical Circulation		
11.1	Lifts	Capable of compliance
11.2	Walkways	Not applicable
11.3	Accessible Ramp	Not applicable

11.4	Stairs	Compliant configuration
11.5	Slip Resistance (Ramps & Stairs)	To be addressed during detailed design

We consider that the drawings presented for assessment, for the purposes of a development application, generally comply with current statutory requirements.

Accessibility requirements are included in Appendix 1 of this report to guide the detailed design. Best Practice options are provided within Appendix 2 and we encourage their implementation into the design.

The recommendations throughout this report reflect the professional opinion and interpretation of Lindsay Perry Access Pty Ltd. This may differ from that of other consultants.

Catherine Walker

CATHERINE WALKER
B. Sc (Arch) B.Arch (Hons)
Access Consultant (ACAA Affiliate Member No. 907)
NSW Registered Architect (8657)

1 Methodology | Accessibility of Childcare Centres

Childcare Centres are required to be accessible to people with disabilities. BCA requires access to and within ALL AREAS used by the occupants.

Within a childcare centre, staff are required to have a degree of mobility due to the nature of the duties performed as a part of their position descriptions.

Position descriptions for childcare workers commonly list the following attributes:

- Strong interpersonal communication skills
- Instructional skills
- Physical stamina (in the context of meeting the demands of the physical energy exerted by the children)
- Current first aid certificate

Physical activities listed within position descriptions for childcare workers often include the following:

- Sitting on the floor
- Bending
- Walking
- Ability to distinguish colour
- Lifting children up to 15kg
- Administering first aid / resuscitation

With regard to staff only ancillary areas, we note that BCA Clause D3.4 Exemptions could be argued. It states the following:

The following areas are not required to be accessible:

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.
c) Any path of travel providing access only to an area exempted by (a) or (b).

Given the typical position description for a childcare worker and the physical activities expected, it would be highly unlikely for a staff member to have a non-ambulant disability.

We consider that access for people with disabilities is not required to the following rooms: store rooms; cot rooms; nappy change rooms; laundry; kitchen; bin store; arts and craft preparation rooms.

It should also be noted that AS 1428.1 (2009) clauses relating to the height for door hardware is not applicable to childcare centres. This includes entry gates fitted with child safety locks.

The following access report has been prepared on this basis.

2 Project Background

The proposed development is a new childcare centre that has been designed over two (2) levels. The basement level provides parking whilst the ground floor accommodates the main pedestrian street entry, the childcare centre that includes six (6) playrooms and associated staff areas and amenities.

Figure 1 | Proposed Development

3 Reviewed Documentation

Documentation prepared by Brown Commercial Building has been reviewed as follows:

dwg no.	drawing name	revision
01	Upper Site Plan	29
02	Lower Site Plan	29
03	Elevations	29
04	Elevations	29
05	Elevations	29
06	Elevations	29

4 Council DCP Requirements for Accessibility

Maitland City Council DCP (2011) Part C-Design Guidelines contains requirements for numerous aspects of accessibility.

Part C.2- Childcare Centres of the DCP is specific to childcare centres but has been repealed. It now notes that;

a) All Child Care Centre developments shall comply with the requirements and matters for consideration under the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017, the Education and Care Services National Regulations and Child Care Planning Guidelines.

5 Legislation

Access assessment has been made against Access Legislation including:

- The Commonwealth Disability Discrimination Act 1992 (DDA)
- Disability (Access to Premises (Buildings)) Standards 2010 – Compilation No. 3, 23 November 2024 including Schedule 1 Access Code for Buildings

- The National Construction Code Building Code of Australia Volume 1 2022 Amendment 1 (BCA)
  - Part D3 D15 Landings (Slip Resistance)
  - Part D3 D22 Handrails
  - Part D4 – Access for People with Disabilities
  - Section E3D7 / ED38 – Lifts
  - Section F4D5/ F4D6 / F4D7 – Accessible Sanitary Facilities
- Australian Standard AS 1428.1 (2009) Amendment 1 & 2, – Design for Access and Mobility
- Australian Standard AS 1428.2 (1992) – Design for Access and Mobility: Enhanced and additional requirements – Buildings and facilities
- Australian Standard AS 1428.4.1 (2009) Amendment 1 – Design for Access and Mobility: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators
- Australian Standard AS 2890.6 (2009) – Parking Facilities – Off street carparking For People with Disabilities.
- Australian Standard AS 1735.12 – Lifts, escalators and moving walks: Lifts for persons with a disability

A summary of the requirements of relevant legislation follows.

The Disability Discrimination Act 1992
The DDA requires independent, equitable, dignified access to all parts of the building for all building users regardless of disability. The DDA makes it unlawful to discriminate against a person on the grounds of disability.

The Disability (Access to Premises) Standards
Any application for a building approval for a new building or upgrade of an existing building triggers the application of the Premises Standards. The Premises Standards include an Access Code written in the same style as the Building Code of Australia. It has a number of Performance Requirements that are expressed in broad terms and references a number of technical Deemed-to-Satisfy Provisions. It is noted that the Access Code for Buildings (Schedule 1 of The Disability (Access to Premises – Buildings) Standards) references AS 1428.1 (2021). This differs to NCC 2022 Amendment 1 that references AS1428.1 (2009). The Australian Building Codes Board advised the following on14 February 2025: *The Premises Standards were reviewed in 2021. This review led to amendments that were made on 23 November 2024. These amendments include changing the Access Code so that it references the 2021 edition of 'AS 1428.1 Design for access and mobility'. (The previous version of the Access Code references the 2009 edition of AS 1428.1, as does the current NCC.)* *Being a legislative instrument, any amendment to the Premises Standards is subject to parliamentary processes. A claim made under an amended Premises Standards that has not completed this process could fail if the amendment*

were repealed. For this reason, the DDA specifies that amendments to the Premises Standards do not take effect until this process is complete.

The amended Premises Standards were presented to the Senate on 26 November 2024. If the parliamentary process proceeds without a repeal, the amended Premises Standards will take effect. Until such time, the previous edition of Premises Standards remains the applicable version. Therefore, there is no current obligation to comply with the 2021 edition of AS 1428.1.

Should the amended Premises Standards take effect, the ABCB will immediately amend the NCC to align with the updated requirements of the Access Code. The primary change in this amendment will be to reference the 2021 edition of AS 1428.1.

Another thing to note is the difference in clause referencing systems between NCC 2022 and the Access Code.

The NCC clause referencing system was changed in NCC 2022. Because the Access Code was developed in 2010, it uses the previous NCC referencing system. As a result, the corresponding provisions of the Access Code and the NCC Volume One have different clause references.

Because the latest review of the Premises Standards occurred in 2021, before NCC 2022, the amended Access Code continues to use the previous NCC referencing system. The ABCB will issue guidance material to assist practitioners navigate the various clause referencing systems should the amended Access Code come into effect.

The National Construction Code / Building Code of Australia (Volume 1)

The Building Code of Australia (BCA) is contained within the National Construction Code (NCC) and provides the minimum necessary requirements for safety, health, amenity and sustainability in the design and construction of new buildings (and new building work in existing buildings) throughout Australia. The BCA is a performance-based code and compliance can be met through satisfying the deemed-to-satisfy provisions or by meeting the prescribed performance requirements.

For a Class 9b Childcare building BCA requires access for people with disabilities to and within all areas usually used by the occupants.

AS 1428 – Design for Access and Mobility

The AS 1428 Suite provides design requirements for accessibility generally, covering all types of disabilities. AS 1428.1 and AS 1428.4.1 are referenced by the NCC / BCA.

- Australian Standard AS 1428.1 (2009) Amendment 1 & 2, – Design for Access and Mobility contains access requirements that are mandatory for the provision of access for persons with a disability
- Australian Standard AS 1428.2(1992) – Design for Access and Mobility: Enhanced and additional requirements – Buildings and facilities provides enhanced and best practice requirements that will minimize DDA risk

- Australian Standard AS 1428.4.1 (2009) Amendment 1 – Design for Access and Mobility: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators

AS 2890.6 – Off-street Carparking for People with Disabilities
AS 2890.6 (2009) applies to the carparking areas generally.

AS 1735– Lifts, escalators and moving walks
AS 1735.12 (1992) contains requirements for passenger lifts for persons with a disability.

6 The Disability (Access to Premises) Standards

Any application for a building approval for a new building or upgrade of an existing building triggers the application of the Premises Standards.

The Premises Standards include an Access Code written in the same style as the Building Code of Australia. Additionally, it offers a number of concessions for existing buildings as outlined below.

6.1 Access Code

The Premises Standards include an Access Code written in the same style as the Building Code of Australia.

Compliance Summary:
Refer to BCA requirements throughout subsequent sections of this report.

Commentary:

While the introduction of NCC 2022 caused clause numbers to differ between documents, the intent of each code remains similar.

It is noted that the Access Code for Buildings (Schedule 1 of The Disability (Access to Premises – Buildings) Standards) references AS 1428.1 (2021). This differs to NCC 2022 Amendment 1 that references AS 1428.1 (2009).

Where the Access Code is in conflict with the NCC due to AS 1428.1 requirements differing between the 2009 & 2021 versions, specific commentary is provided throughout this report as relevant to the project.

6.2 New Part and Affected Part (Existing Buildings)

The Disability (Access to Premises – Buildings) Standards apply to ...a new part, and any affected part, of a building, to the extent that the part of the building is...a Class 3, 5, 6, 7, 8, 9 or 10 building (Clause 2.1).

New part is defined as follows (Clause 2.1 (4)):

- An extension to the building or a modified part of the building.

An affected part is defined as follows (Clause 2.1 (5)):

- The principal pedestrian entrance of an existing building that contains a new part; and
- 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.

Compliance Summary:

Not applicable

Commentary:

New work and affected part provisions (Part 2.1(4 & 5)) are applicable to modification works only, not new developments.

7 CCPG | Access for People with Disabilities

The Child Care Planning Guideline (CCPG) is intended to assist those responsible for the management, planning, design, construction and maintenance of new child care facilities. They are a suite of information to aid in the planning, design and use of facilities. C16 relates to Access for People with Disabilities.

The CCP Guideline includes the following statements:

- The design quality principles establish the broad design context guide of all new proposals for childcare facilities, regardless of whether they are stand alone, part of a mixed-use development, modifications or retrofits of existing buildings or seeking to occupy premises without incurring new building works.
- The considerations give guidance to applicants on how to design a high-quality proposal that takes account of its surroundings and any potential environmental impacts the development may cause and to be mindful of potential impacts that
  - may arise from existing uses and conditions within a locality.
- The matters support the design principles and must be considered by the consent authority when assessing a DA for a childcare facility. Childcare facilities can be developed in a broad range of locations and need to be flexible in how they respond to the requirements and challenges this brings.

7.1 C16 Access for People with Disabilities content

Objective: To ensure that childcare facilities are designed to be accessible by all potential users.

C16 Accessible design can be achieved by:

- providing accessibility to and within the building in accordance with all relevant legislation
- linking all key areas of the site by level or ramped pathways that are accessible to prams and wheelchairs, including between all car parking areas and the main building entry
- providing a continuous path of travel to and within the building, including access between the street entry and car parking and main building entrance. Platform lifts should be avoided where possible

- minimising ramping by ensuring building entries and ground floors are well located relative to the level of the footpath.

Note: The National Construction Code and the Disability (Access to Premises – Buildings) Standards 2010 set out the requirements for access to buildings for people with disabilities.

Compliance Summary:
Compliant

Commentary:
The proposed design is generally in keeping with the NCC and associated standards as demonstrated throughout this report.

8 BCA | Access and Approach + External Areas Generally

The approach to the building needs to be addressed when considering access for persons with a disability. The BCA has three requirements for the approach to the building for persons with a disability.

An accessible path of travel is required to the building entrance from the main points of pedestrian entry at the allotment boundary, from another accessible building connected by a pedestrian link, and from required accessible carparking spaces on the allotment.

In this instance, the approach to the building has been considered as follows:

- from the main points of the pedestrian entry along Steam Street at the allotment boundary, and
- from another accessible building connected by a pedestrian link (not applicable), and
- from the required accessible carparking space on the allotment.

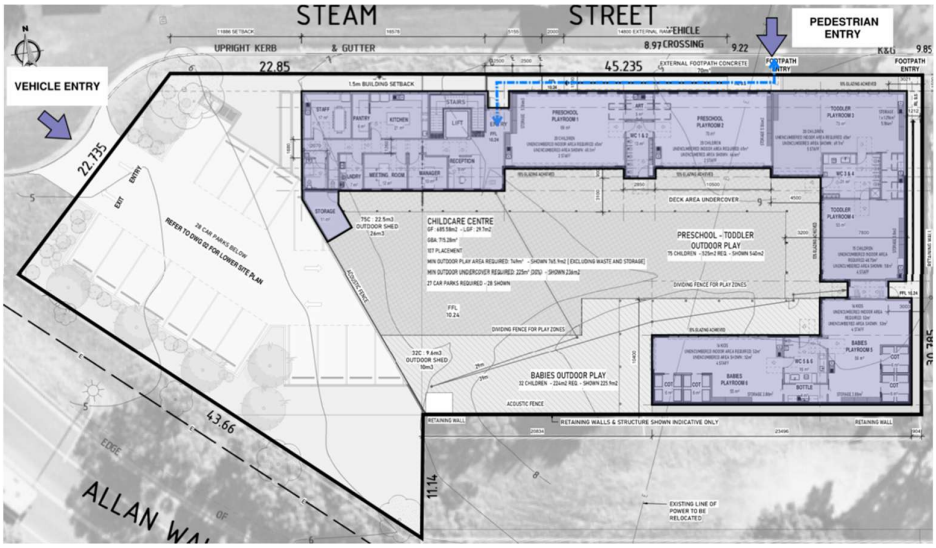


Figure 2 | Overall Site Plan

8.1 Approach from Allotment Boundary

The BCA requires that a continuous accessible path of travel be provided from the allotment boundary at the main points of pedestrian entry to the main entrance.

Compliance Summary:

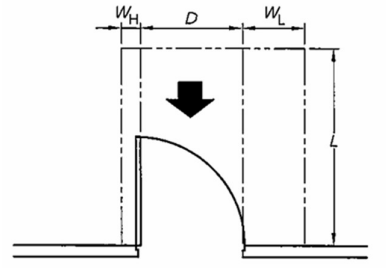
Capable of compliance

Commentary:

An accessible path of travel is provided to the building entrance from the allotment boundary along Steam Street via a formed footpath and a 1:20 gradient walkway.

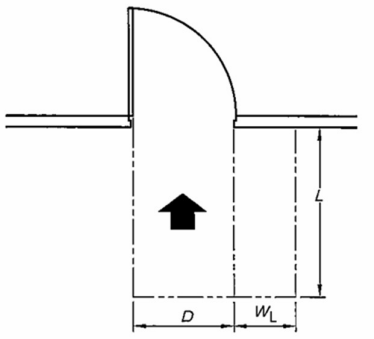
Sufficient wheelchair clearance is provided at the base of the walkway to facilitate a 90 degree wheelchair turn. Ensure during detailed design that a clear 1500 x 1500mm turning space is maintained.

A hinged gate is at the top of the walkway and required clearances are capable of being provided. Ensure during detailed design that the gate provides a minimum clear opening width of 850mm and the following clearances are provided either side of the gate opening.



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1450	110	530
900	1450	110	530
950	1450	110	530
1000	1450	110	530

(h) Front approach, door opens towards user



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1450	0	510
900	1450	0	510
950	1450	0	510
1000	1450	0	510

(d) Front approach, door opens away from user

Ensure that a wall or kerb is provided to the walkway edges in accordance with Figure 18 and 19 of AS1428.1. The kerb cannot be within the clearances required to the door.

8.2 Approach from Accessible Carparking

The BCA requires that a continuous accessible path of travel be provided from the accessible carparking areas to the main entrance.

Compliance Summary:

Compliant configuration

Commentary:

An accessible path of travel is provided to the building entrance via a kerb ramp and a formed footpath from the accessible carpark.

The kerb ramp has adequate landing space at top and bottom.

8.3 Accessways (Pedestrian Areas Generally)

The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS 1428.

Compliance Summary:

Compliant

Commentary:

Other than the approach to the building from the accessible carparking space and the main pedestrian entry from the street, there are no other accessible paths of travel on site.

The side pathway from Steam Street is a dedicated fire exit route from the building.

8.4 Accessible Carparking

There is a requirement for the provision of accessible carparking within this development.

For a childcare centre (Class 9b) BCA requires one (1) accessible space for every one-hundred (100) carparking spaces or part thereof.

Compliance Summary:

Compliant

Commentary:

Basement level parking is provided with entry on the western side of the building. Plans note a total of twenty-eight (28) carparking spaces, one (1) of which is nominates as an accessible space. It is located in close proximity to the building entrance.

The overall configuration of the accessible carparking achieves compliance with current legislation including dimensions of the space and associated shared areas, chevron markings and provision of a bollard.

8.5 Kerb Ramps

Where kerb ramps are provided to pedestrian areas within the accessible path of travel, the configuration of kerb ramps is to be in accordance with AS 1428.

Compliance Summary:

Compliant configuration

Commentary:

A kerb ramp is provided on the accessible path of travel between the vehicular way and pathway to the building entrance. The kerb ramp has 45 degree splays, adequate width and is provided the right sized landings top and bottom.

8.6 Stairs

AS 1428.1 has access requirements for all public access stairs and is applicable in this instance.

Compliance Summary:

Compliant configuration

Commentary:

There are no external stairs proposed. Refer to "Clause 11 BCA | Vertical Circulation" for commentary of the internal stairs.

8.7 Walkways

AS 1428.1 defines a walkway as having a gradient between 1:33 and 1:20. The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS 1428.

Compliance Summary:

Capable of compliance

Commentary:

Walkways are provided as part of the pedestrian access from Steam Street to the main building entrance. The northern walkway is 14.8m long which is under the maximum 15m, and has the right length landings top and bottom.

The bottom landing provides a 1500 x 1500 clearance for a 90-degree turn. Refer to Clause 8.1 above regarding gate clearances at the top and bottom of the walkway.

Ensure that the edges of walkways have walls or kerbs. These kerbs and walls are not to be within the required clearances.

The eastern walkway provides an emergency fire egress route from the building.

8.8 Threshold Ramp

To mitigate water ingress, it is sometimes necessary to construct a threshold ramp at building entrances.

Compliance Summary:

Capable of compliance

Commentary:

Threshold ramps aren't currently shown on the plans, however if during detailed design the entrances can't be made level, then they will be required. Ensure maximum rise of 35mm and depth of 280mm.

8.9 Accessible Entrance

In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and not less than 50% of all pedestrian entrances including the principal pedestrian entrance.

In a building with a total floor area more than 500 sqm a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance.

Compliance Summary:

Compliant configuration

Commentary:

A single hinged doorway provides entry to the building and offers compliant circulation areas. Ensure that the selected door enables a clear opening width of 850mm.

A level threshold hold is achievable at the doorway. Where a level threshold is not provided, instead a threshold ramp must be used.

8.10 Tactile Indicators at Entrance

BCA Clause D4D9 states that for a building that 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 – in the absence of a suitable barrier – an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building…if there is no kerb or kerb ramp at that point, except for areas exempted by D4D5.

If no kerb is provided between the entrance and the driveway area, tactile indicators are required.

Compliance Summary:

Not required

Commentary:

A kerb ramp is provided, so warning TGSIs are not required.

8.11 Non-accessible Entrances

In a building with a total floor area more than 500 sqm a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance.

Compliance Summary:

Not applicable

Commentary:

The eastern doorway is a dedicated exit route.

8.12 Gates

Where gates form a part of the approach to the building, they need to offer compliance with AS 1428.1 (2009) similar to a doorway.

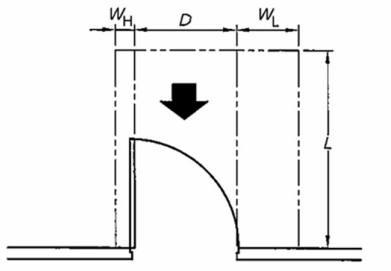
Compliance Summary:

Capable of compliance.

Commentary:

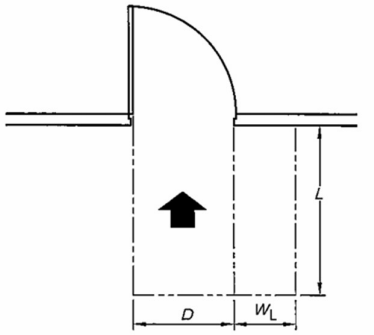
A single hinged gate is located on the approach to the building from the main pedestrian entrance off Steam Street.

It is located on an accessible path of travel and required clearances are capable of being provided. Ensure during detailed design that the gate provides a minimum clear opening width of 850mm and the following clearances are provided either side of the gate opening to both sides.



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1450	110	530
900	1450	110	530
950	1450	110	530
1000	1450	110	530

(h) Front approach, door opens towards user



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1450	0	510
900	1450	0	510
950	1450	0	510
1000	1450	0	510

(d) Front approach, door opens away from user

Ensure that a wall or kerb is provided to the walkway edges in accordance with Figure 18 and 19 of AS1428.1. The kerb cannot be within the clearances required to the gate.

The gate hardware has an exemption on height as per childcare requirements, but it must be a lever handle as per AS1428.1.

9 BCA | Interior

The building is designed over two (2) levels. The basement level provides car parking and an entrance lobby from the carparking. The ground floor provides six (6) playrooms and associated staff areas and amenities. The interior areas are subject to accessibility requirements. There is no internal corridor that connects the spaces required to be accessible and as such an external path of travel through the play areas is required to be accessible.

9.1 Extent of Access Generally – BCA

For a childcare centre (Class 9b) access for people with disabilities is required to and within all areas normally used by the occupants.

Compliance Summary:

Capable of compliance

9.2 Circulation Areas

BCA (Clause D4D4) requires the provision of turning spaces and passing areas to corridors to enable wheelchair circulation throughout a building.

Turning spaces 1540mm wide by 2070mm long are required within 2m of the end of corridors to enable a wheelchair to turn through 180° and passing areas 1800mm wide by 2000mm long are required every 20m along a corridor unless there is a clear line of sight.

Within corridor areas, 1500x1500mm is required to facilitate a 90° turn by a wheelchair. This must be accommodated within accessible areas.

Compliance Summary:

Compliant

Commentary:

Compliant circulation areas have been provided.

9.3 Doorways Generally

AS 1428.1 has requirements for doorways within the accessible path of travel to enable independent access for people using a wheelchair.

Compliance Summary:

Capable of compliance

Commentary:

Doorways within the accessible path of travel achieve the required circulation areas. Ensure during detailed design that

required clearances are maintained to finished surfaces at floor level (skirtings)

Doorways to external areas and rooms required to be accessible are required to have a level threshold to facilitate wheelchair access.

We recommend that fire egress doors achieve a clear opening width of 850mm as per doorways within the accessible path of travel. This permits the use of the exit for people with disabilities.

9.4 Hearing Augmentation at Service Counters

For buildings that are required to be accessible, the BCA (Clause D4D8) requires hearing augmentation systems at service counters where the user is screened from the service provider. We note that this may not be relevant to this project.

With the implementation of "sneeze screens" as a COVID-19 mitigation measure, the provision of hearing augmentation at service counters has become a critical accessibility issue for people with hearing impairments.

Compliance Summary:

To be addressed during detailed design.

9.5 Hearing Augmentation

For buildings that are required to be accessible, the BCA (Clause D4D8) requires hearing augmentation systems within auditoriums, meeting rooms and the like where an inbuilt amplification system, other than the one used for emergency warning is installed. The following systems can be used:

- An induction loop to at least 80% of the floor area;
- A system requiring the use of receivers (infrared or the like) to not less than 95%.

Compliance Summary:

To be addressed during detailed design.

9.6 Exempt Areas

BCA Clause D4D5 does not require access for people with disabilities to areas that would be inappropriate due to the particular use of the area or would pose a health and safety risk. This includes the path of travel to these areas.

Compliance Summary:

None specified

Commentary:

Within this development, the following areas are considered to be exempt from requiring access for people with disabilities: store rooms; kitchen; art rooms; children's toilet rooms; bottle rooms; and cot rooms.

9.7 Floor Finishes

All floor finishes are to be flush to provide an accessible path of travel throughout the different areas of the building. Maximum allowable construction tolerance is 3mm (5mm for beveled edges) as part of the accessible path of travel.

Compliance Summary:
To be addressed during detailed design stages

9.8 Carpet

BCA requires a maximum carpet pile height of 11mm and carpet backing thickness not exceeding 4mm.

Compliance Summary:
To be addressed during detailed design stage.

9.9 Controls

Controls such as light switches, GPOs, alarm keypads, card swipes, etc are to be located within the accessible height range of 900-1100mm above the floor level and not within 500mm of an internal corner to comply with AS 1428.1(2009), Clause 14.

We recommend that video intercoms be installed at 1200mm affl - this is within the range of common view per AS 1428.2 (1992).

Compliance Summary:
To be addressed during detailed design stage.

9.10 Visual Indication to Glazing

Provide decals to all full height glazing that can be mistaken for a doorway to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level.

Compliance Summary:
To be addressed during detailed design stage.

9.11 Tactile Indicators

For a building that 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 a hazard (BCA D4D9).

Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background color (45% for discrete tactile indicators and 60% for discrete two-tone tactile indicators).

Compliance Summary:
To be addressed during detailed design stage.

9.12 Signage

Signage to identify sanitary facilities, hearing augmentation and required exits are to be provided in accordance with BCA Clause D4D7. This includes provision of the International Symbol for Access or International Symbol for Deafness as appropriate. Signage to comply with AS 1428.1 (2009), Clause 8.

Compliance Summary:

To be addressed during detailed design stage.

10 BCA | Sanitary Facilities

The BCA / Access Code for Buildings (Clause F4D5) require the provision of sanitary facilities catering for people with disabilities.

10.1 Distribution of Accessible Sanitary Facilities

Accessible sanitary facilities are required as follows – these are general requirements and not project specific.

- A unisex accessible toilet at each level that provides sanitary facilities. Where more than one bank of toilets is provided at any level, at least 50% of those banks will have an accessible toilet facility.
- At each bank of toilets where there is one or more toilets in addition to a unisex accessible sanitary compartment at the bank of toilets, a sanitary compartment suitable for a person with an ambulant disability must be provided for use by males and females.
- A unisex accessible shower is required where showers are required by F4D7. (not required within this development).
- A unisex accessible adult change facility must be provided in some public buildings (not required within this development).

  There are no statutory requirements for the provision of accessible children's toilets within a childcare centre.

Compliance Summary:

Compliant configuration

Commentary:

A unisex accessible sanitary compartment and a unisex ambulant toilet are provided on the western end of the ground floor of the building.

Typically, a male and a female ambulant toilet are required to be provided in addition to the accessible toilet facility. However, the provision of unisex ambulant toilets is considered to meet BCA requirements via clause F4D4(4) which states that if most employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy. If more

than 2 male employees will be employed at any point, then a separate ambulant toilet facility for each gender will be required.

10.2 Unisex Accessible Sanitary Compartment

A unisex accessible sanitary compartment is provided within this development.

Compliance Summary:

Compliant configuration

Commentary:

Overall room dimensions and the arrangement of fixtures is conducive to compliance with current accessibility legislation.

10.3 Ambulant Toilets

An ambulant toilet is provided within this development.

Compliance Summary:

Capable of compliance

Commentary:

A single unisex ambulant toilet facility is provided with overall room dimensions and circulation areas being conducive to compliance with current accessibility legislation.

The provision unisex ambulant toilets is considered to meet BCA requirements – clause F4D4(4) states that if the majority of employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy.

Ensure provision of grab rails, internal wall to wall of 900-920mm and door that provides a clear opening width of 700mm minimum.

11 BCA | Vertical Circulation

A lift provides the main means of accessibility between levels of the building. A passenger lift is provided within the development. Stairs within the building are non-fire isolated stairs that wrap around the lift.

11.1 Passenger Lift

Where passenger lifts are provided within a building to facilitate access between levels, they must meet the minimum requirements of the NCC / BCA with regard to the internal lift car size, which is dependent upon the total vertical distance that the lift travels.

Compliance Summary:

Capable of compliance

Commentary:
A single passenger list is provided for access between levels. The overall size of the lift shaft is capable of accommodating a minimum lift car of adequate dimensions for compliance with BCA with regards to accessibility. That is a minimum of 1100 x 1400mm internal floor area required with 900mm clear opening to door.

Adequate circulation areas are provided at lift landings for wheelchair turning / maneuvering in accordance with AS1428.1 for access through doors.

11.2 Walkways

AS 1428.1 defines a walkway as having a gradient between 1:33 and 1:20. The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS 1428. We note that walkways do not require the provision of handrails or tactile indicators.

Compliance Summary:
Not applicable.

Commentary:
There are no internal walkways proposed.

11.3 Accessible Ramps

AS 1428.1 defines an accessible ramp as having a gradient between 1:19 and 1:14 For curved ramps with a gradient of 1:14, a minimum width of 1500mm is required and the minimum allowable radius is to be 1900mm (AS 1428.1 (2009), clause 10.4).

Compliance Summary:
Not applicable.

Commentary:
There are no accessible ramps proposed.

11.4 Stairs

AS 1428.1 has access requirements for all stairs other than fire isolated egress stairs and is applicable in this instance.

Compliance Summary:
Compliant configuration

Commentary:
Stairs are provided as a part of the pedestrian access from the carpark to the building. The overall configuration of the stairs achieves compliance with current legislation including handrails with extensions both sides and tactile indicators top and bottom.

The TGSIs at the base of the stairs can be reduced to 300mm. AS1428.4.1 only requires 300mm TGSIs where the stair landing is less than 3m deep.

Note for detailed design; Within a school or childcare centre, the stairs are required to have a secondary handrail at a height of 665-750mm per BCA D3D22 (1)(c). Ensure provision of contrasting non-slip nosings to treads.

11.5 Slip Resistance (Stairs and Ramps)

The BCA defines the following slip resistance requirements for stairs and ramps:

Application	Surface Conditions	
	Dry	Wet
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or Landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4

Compliance Summary:

To be addressed during detailed design stage.

12 Conclusion

This report demonstrates that the fundamental aims of accessibility legislation are achievable within the proposed development. Spatial planning and general arrangements of facilities will offer inclusion for all building users.

Disability is often defined as any limitation, restriction or impairment which restricts everyday activities and has lasted or is likely to last for at least 6 months. Disabilities can be very varied. They can be physical, cognitive, intellectual, mental, sensory, or developmental. They can be present at birth or can occur during a person's lifetime. They can also be permanent or temporary. In Australia, almost one in five people – 4.3 million – have a disability with one in three having severe or profound core activity limitation.

Equity and dignity are important aspects in the provision of access to buildings for all users. With respect to people with a disability, equity and dignity are sometimes overlooked in the construction of new buildings or refurbishment works. The design approach needs to maintain a high level of equity for people with disabilities and meet the performance requirements of the BCA. The performance requirements adopt two main concepts in the provision of access for people with a disability being to the degree necessary and safe movement. Both of these concepts need to be achieved within the context of equitable and dignified access.

In this respect, a wide range of disabilities needs consideration and a compromise reached between requirements of different disability groups. Measures need to be implemented to ensure inclusion of all users, not a particular disability group in isolation.

We consider that the drawings presented for assessment, for the purposes of a development application, demonstrates that compliance with current statutory requirements affecting accessibility is achievable subject to detailed design at the construction certificate stage (refer to Appendix 1 for requirements).

Appendix 1 | Accessibility Requirements

The following accessibility requirements are to be incorporated into the detailed design to ensure compliance of the built form.

Accessways Generally

The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS1428 as follows:

a. The minimum unobstructed width of all pathways is to be 1000mm (AS1428.1, Clause 6.3). A width of 1200mm is preferred for compliance with AS1428.2.

b. All pathways are to be constructed with no lip or step at joints between abutting surfaces (a construction tolerance of 3mm is allowable, or 5mm for bevelling edges).

c. The maximum allowable crossfall of pathways is to be 1:40.

d. The ground abutting the sides of the pathways should follow the grade of the pathway and extend horizontally for 600mm. We note that this is not required where there is a kerb or handrail provided to the side of the pathway.

e. Pathways to have passing bays complying with AS1428.1 at maximum 20m intervals where a direct line of site is not available. They are required within 2m of the end of the pathway where it is not possible to continue travelling along the pathway. A passing space shall have a minimum width of 1800 for a minimum length of 2000mm. Refer to AS1428.1, Clause 6.4.

f. Grated drains within the accessible path of travel are to have circular openings no greater that 13mm in diameter and slotted openings not greater than 13mm wide – elongated openings must traverse the direction of travel.

Walkways

AS 1428.1 has access requirements for walkways as follows:

a. The minimum unobstructed width of walkways is to be 1000mm (AS1428.1, Clause 6.3). A width of 1200mm is preferred for compliance with AS1428.2.

b. Walkways are to be constructed with no lip or step at joints between abutting surfaces (a construction tolerance of 3mm is allowable, 5mm for bevelled edges -refer to Figure 6 of AS1428.1).

c. The maximum allowable crossfall of a walkway is to be 1:40.

d. Surface of the walkway to be slip-resistant.

e. The ground abutting the sides of the walkway should follow the grade of the pathway and extend horizontally for 600mm. This is not required where there is a kerb or handrail provided (refer to AS1428.1 Clause 10.2).

f. Maximum allowable gradient of the walkway is 1:20 and maximum length between landings to be 15m (for 1:20 gradient). Landings to be a minimum 1200mm in length (where there is no change in direction). For changes in direction of 180º, landings to be 1540mm in length – refer to AS1428.1(2009), Clause 10.8.

Accessible Ramps – External

AS 1428.1 has access requirements for accessible ramps as follows:

a. Ramp to comply with AS1428.1, Clause 10.3. Maximum allowable gradient of the ramp is 1:14, minimum clear width to be 1000mm (1500mm for curved ramps) and maximum length between landings to be 9m (for 1:14 gradient). Increased circulation areas are required at landings to facilitate wheelchair maneuverability.

b. Accessible ramp is to have a maximum rise of 3.6m (BCA Clause D4D12)

c. The ramp is required to be set back a minimum 900mm from the property boundary (AS1428.1, Clause 10.3 (f)). This allows tactile indicators and handrail extensions to occur within the boundary and not protrude into the footpath area.

d. Provide handrails, with extensions, to both sides of the ramp to comply with AS1428.1, Clause 12. Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails are required on both sides of the ramp to cater for left and right handed disabilities.

e. Where ramp is not enclosed, provide kerb rails in accordance with AS1428.1. The height of kerb rails is to be less than 65mm or greater than 150mm above the finished surface level. This is to ensure that the foot plate of a wheelchair cannot become lodged on the kerb rail.

f. Provide tactile indicators at the top and bottom of the ramps to comply with BCA Clause D4D9 and AS1428.4. Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators at the top and bottom of the ramps to be 600-800mm deep across the width of the ramp and set back 300mm from the edge of the ramp (refer AS1428.4, Figure A1).

Stairs – External

AS 1428.1 has access requirements for all public access stairs as follows:

a. Stairs to comply with AS1428.1(2009), Clause 11.2.

b. Stairs to have closed or opaque risers. Open risers cause confusion for persons with a vision impairment and may trigger conditions such as epilepsy due to light penetrating through the open riser.

c. Provide handrails, with extensions, to both sides of the stair (AS1428.1 (2009), Clause 11.2 & 12). Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis.

   Handrails are required on both sides of the stair to cater for left and right-handed disabilities. A central handrail is also an acceptable solution where adequate width is available. In this instance, the use of a double handrail is encouraged so that two users can travel in opposite directions and maintain their grip on the handrail.

   Within a school or childcare centre, the stairs are required to have a secondary handrail at a height of 665-750mm per BCA D3D22 (1)(c)

d. Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.

e. Stair nosings shall not project beyond the face of the riser.

f. Provide tactile indicators at the top and bottom of the stair to comply with BCA Clause D4D9 and AS1428.4.

   Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

   Tactile indicators at the top and bottom of the stair to be 600-800mm deep across the width of the stair set back 300mm from the edge of the stair.

Kerb Ramps

AS 1428.1 has access requirements for kerb ramps as follows:

a. Kerb ramps to comply with AS1428.1 (2009) Amendment 1, Clause 10.7

b. Maximum gradient of the kerb ramps to be 1:8 and maximum length to be 1520mm (providing a maximum height of 190mm).

c. Kerb ramps to have a non-slip surface as required by AS1428.

d. A tooled joint should be provided between parts of the kerb ramp to assist persons with a vision impairment with orientation.

Accessible Carparking

Access requirements for the accessible carparking are as follows and should be addressed during preparation of the construction certificate documentation.

a. Accessible carparking to be a minimum of 2400mm wide with a shared area to one side of the space 2400mm wide. Circulation space can be shared between adjacent accessible carparks. For a single space, a total width of 4800mm is required.

   For parallel parking arrangements, the accessible space is to be a minimum 3200mm wide x 7800mm long. A shared area 1600mm wide is required at the same level of the parking space.

b. Provide a bollard to the shared circulation space as illustrated in AS2890.6, Figure 2.2.

c. The maximum allowable crossfall of accessible carparking area to be 1:40. This crossfall applies both parallel and perpendicular to the angle of parking.

d. For covered carparking, the clear height of the accessible carparking space to be 2500mm as illustrated in AS2890.6, Figure 2.7.

e. Designated accessible carparking is to be identified using the International Symbol for Access (ISA) between 800and 1000mm high placed as a pavement marking in the centre of the space between 500-600mm from its entry point. The perimeter of the space is to be identified by an unbroken yellow & slip resistant line 80-100mm wide (except where there is a kerb or wall)

f. Shared space to be identified using yellow slip-resistant & unbroken stipes 150 to 200mm wide with spaces 200 to 300mm between stripes. Stripes to be at an angle of 45° to the side of the space.

Threshold Ramp

Threshold ramps are to offer compliance with AS1428.1 (2009). Requirements are as follows.

a. Threshold ramp to comply with AS1428.1, Clause 10.5.

b. Threshold ramp to have a maximum rise of 35mm, maximum length of 280mm and maximum gradient of 1:8.

c. Threshold ramp to be located within 20mm of the door leaf that it services.

Accessible Entrances

Access requirements for entrances are as follows.

a. Entrance to comply with AS1428.1(2009), Clause 13 as part of the accessible path of travel.

b. Doors are to have a minimum clear opening width of 850mm to comply AS1428.1(2009), Clause 13.2 as part of the accessible path of travel.

c. Door threshold to be level to provide seamless entry as part of the accessible path of travel. Maximum allowable construction tolerance is 3mm for compliance with AS1428.1(2009), 5mm where beveled edges are provided between surfaces – refer to Figure 6.

d. Door to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5)

e. For glass doors, provide decals to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level. Decals are to be solid. AS1428.1, Clause 6.6.

f. Where double door sets are provided, one door leaf is to be capable of being held in the closed position to provide door opening widths and circulation to comply with AS 1428.1.

g. For a best practice approach to access, and to assist people with a vision impairment locate the entrance, consider providing features with a minimum 30% luminance contrast to the background surface such as an entry mat or awning.

Non-Accessible Entrances

The following access requirements apply to the non-accessible entrance.

a. Provide direction signage displaying the location of the accessible entrance that displays the International Symbol for Access per BCA Specification 15.

Tactile Indicators at Building Entrances

BCA Clause D4D9 (a) (v) states that for a building that 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 – in the absence of a suitable barrier – an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building…if there is no kerb or kerb ramp at that point, except for areas exempted by D4D5. If no kerb is provided between the entrance and the driveway area, tactile indicators are required.

The following access requirements apply.

a. Where no kerb is provided, install tactile indicators for compliance with BCA Clause D3.8 and AS1428.4.

b. Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

c. Tactile indicators to be 600-800mm deep across the width of the path of travel set back 300mm from the edge of the driveway / roadway.

Circulation Areas Generally

BCA requires the provision of turning spaces and passing areas to corridors to enable wheelchair circulation throughout a building.

Turning spaces 1540mm wide by 2070mm long are required within 2m of the end of corridors to enable a wheelchair to turn through 90° and passing areas 1800mm wide by 2000mm long are required every 20m along a corridor unless there is a clear line of sight.

Within corridor areas, 1500x1500mm is required to facilitate a 90° turn by a wheelchair. This must be accommodated within accessible areas.

Doorways

Access requirements for doorways within the accessible path of travel are as follows:

a. Doorways within the accessible path of travel to have a minimum clear opening width of 850mm (AS1428.1(2009), Clause 13.2). We recommend the use of a 920 leaf door as a minimum to achieve adequate clear width.

   For double doors, the operable leaf must achieve this clear opening width to facilitate single leaf operation.

b. All doorways within the accessible path of travel to have complying circulation areas as illustrated in AS1428.1(2009), Figure 31. Circulation areas to have a maximum crossfall of 1:40.

c. Doors between indoor and outdoor spaces to have a level threshold for seamless transition.

d. Doorways to have minimum 30% luminance contrast as described in AS1428.1(2009), Clause 13.1.

e. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5). Note that within a childcare centre, this is applicable to the unisex accessible sanitary facilities only.

f. Door handles and related hardware shall be able to be unlocked and opened with one hand per AS1428.1 (2009), Clause 13.5.1. The handles shall enable a person who cannot grip to operate the door without their hand slipping from the handle. We recommend the use of lever handles.

g. For manual controls to automatic doorways, buttons to be located no closer than 500mm from an internal corner and between 1000mm and 2000mm from the hinged door leaf or surface mounted sliding door in the open position. Height of controls to be 900-1100mm affl.

h. Doorways to external areas to achieve a level threshold as part of the accessible path of travel. Maximum allowable construction tolerance is 3mm for compliance with AS1428.1(2009), 5mm where beveled edges are provided between surfaces.

i. Doorways to have operational forces per AS1428.1 (2009), Clause 13.5.2. A maximum allowable force of 20N is required to operate the door.

Doorways within Vestibules and Airlocks

AS1428 has requirements for circulation areas between doorways within vestibules / airlocks to enable independent access for people using a wheelchair. Clause 13.4 requires a minimum dimension of 1450mm between doors. Where a doorway encroaches into the space, 1450mm plus the door leaf width is required.

Doorways within Vestibules and Airlocks to Ambulant Toilets

AS1428 has requirements for circulation areas between doorways within vestibules / airlocks as part of the path of travel to ambulant toilet cubicles to enable independent access for people using a mobility aid. Figure 34(b) requires a minimum dimension of 900mm between doors. Where a doorway encroaches into the space, 900mm plus the door leaf width is required.

Hearing Augmentation

For buildings that are required to be accessible, the BCA (Clause D4D8) requires hearing augmentation systems within auditoriums, meeting rooms and the like where an inbuilt amplification system, other than the one used for emergency warning is installed. An induction loop to at least 80% of the floor area is required.

The hearing augmentation system is to be identified using the International Symbol for Deafness.

Hearing Augmentation at Service Counters

For buildings that are required to be accessible, the BCA (Clause D4D8) requires hearing augmentation systems at service counters where the user is screened from the service provider. We note that this may not be relevant to this project.

With the implementation of "sneeze screens" as a COVID-19 mitigation measure, the provision of hearing augmentation at service counters has become a critical accessibility issue for people with hearing impairments.

The hearing augmentation system is to be identified using the International Symbol for Deafness.

Floor Finishes

All floor finishes are to be flush to provide an accessible path of travel throughout the different areas of the building. Maximum allowable construction tolerance is 3mm (5mm for bevelled edges) as part of the accessible path of travel. Refer to AS1428.1(2009), Clause 7.2 for further details.

Carpet

BCA requires that the pile height or pile thickness does not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm.

Controls

Controls such as light switches, GPOs, alarm keypads, card swipes, etc are to be located within the accessible height range of 900-1100mm above the floor level and not within 500mm of an internal corner to comply with AS1428.1(2009), Clause 14.

We recommend that video intercoms be installed at 1200mm affl - this is within the range of common view per AS1428.2 (1992).

Visual Indication to Glazing

Provide decals to all full height glazing that can be mistaken for a doorway to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level. Decals are to be solid.

As a guide, AS1288 (2006) states that the following glazed areas are not considered capable of being mistaken for a doorway:

- The width is less than or equal to 500mm
- The height is less than or equal to 1000mm
- The lowest point of the opening is 500mm or greater above the floor /ground level
- The glazing is opaque, patterned or a leadlight
- Where a chair / crash rail, handrail or transom is provided and located with its upper edges not less than 700mm or its bottom edge not more than 1000mm above the floor
- The panels are louvres with a blade width not greater than 230mm
- The glazing protects a difference n level of 1000mm or more (a balustrade system)

Tactile Indicators

For a building that 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 a stairway (other than a fire isolated stair); an escalator; a moving walkway; a ramp (other than a fire isolated ramp, step ramp, kerb ramp or swimming pool ramp); and in the absence of a suitable barrier, an overhead obstruction less than 2m above the floor level or an accessway ,meeting a vehicular way if there is no kerb or kerb ramp (BCA D4D9).

Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background color (45% for discrete tactile indicators and 60% for discrete two-tone tactile indicators).

Signage

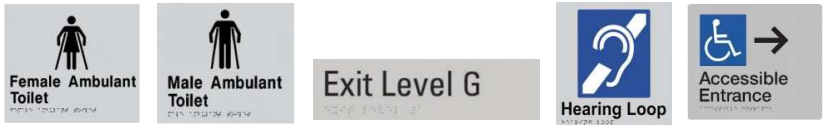
Access requirements for signage are as follows. Note that this does not include general wayfinding signage.

a. Braille and tactile signage formats as outlined within BCA Specification 15 that incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 must be provided to identify the following:
   - a sanitary facility, except a sanitary facility associated with a bedroom in a Class 1b building or a sole-occupancy unit in a Class 3 or Class 9c building
   - a space with a hearing augmentation system
   - each door required by E5D5 to be provided with an exit sign and state level
   - an accessible unisex sanitary facility and identify if the facility is suitable for left or right handed use
   - an ambulant accessible sanitary facility 1 and be located on the door of the facility
   - where a pedestrian entrance is not accessible, directional signage incorporating the international symbol of access to direct a person to the location of the nearest accessible pedestrian entrance
   - where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary

b. Braille and tactile components of the sign to be located not less than 1200mm and not higher than 1600mm affl.

c. Signage to be located at the latch side of the doorway with the leading edge of the sign 50-300mm from the architrave. Where this is not possible, the sign can be located on the door.

   Sample signs are as follows. These are examples only – ensure selected signage complies with BCA Specification 15 including provision of Braille locator for multiple lines of text and characters.



Unisex Accessible Sanitary Compartment

Access requirements for the accessible toilet facilities are as follows. For compliance with AS1428.1(2009), the minimum room dimensions of the accessible toilet are to be 1900x2300mm plus additional area for the handbasin. These are CLEAR dimensions. Provision for wall linings needs to be considered.

a. Accessible toilet facilities to be unisex facilities for compliance with the BCA.

b. Unisex accessible facilities to comply with AS1428.1(2009), Clause 15 including set-out of fittings and fixtures, circulation areas and doorways.

c. Where more than one unisex accessible toilet is provided within the building, they should be in a mirrored configuration to allow for both left and right-handed use.

WC Pan:

a. Crucial dimensions for the toilet are 450mm from centreline of pan to side wall, 800mm from front of pan to rear wall and a seat height of 470mm.

b. A minimum clear dimension of 1400mm is required from the toilet pan to any other fixture (see figure 43).

c. Grabrails to be provided at the side and rear of the toilet in compliance with AS1428.1 at a height of 800mm.

d. Toilet seat shall be of the full round type, be securely fixed in position when in use and have fixings that create lateral stability. They should be load rated to 150kg, have a minimum 30% luminance contrast to the background colour (eg pan, wall or floor) and remain in the upright position when fully raised.

e. Provide a backrest to accessible toilets to comply with AS1428.1, Clause 15.2.4.

Basin:

f. For the basin, a minimum dimension of 425mm is required from the centreline of the basin to the side wall and height of basin to be between 800 and 830mm.

g. Taps to have lever handles, sensor plates or similar controls. For lever taps, a minimum 50mm clearance to be provided to adjacent surfaces.

Door:

h. Doorways to have a minimum clear opening width of 850mm to comply AS1428.1(2009), Clause 13.2 as part of the accessible path of travel. Adequate circulation area at the latch side of the doorway is required to allow independent access to the facility – for details refer to AS1428.1, Figure 31.

i. Door hardware to be located within the accessible height range of 900-1100mm above the finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

Controls:

j. Controls such as light switches within the accessible toilet facilities to be in the accessible height range of 900-1100mm above the finished floor level to comply with AS1428.1(2009), Clause 14. Controls should be located not less than 500mm to a corner.

Unisex Accessible Shower

Access requirements for the accessible shower facilities are as follows. These are CLEAR dimensions. Provision for wall linings needs to be considered.

a. Accessible showers are to comply with AS 1428.1, Clause 15.5 and include accessible features such as grabrails, adjustable height shower rose and fixtures within an accessible height range.

b. Floor waste to be positioned 550mm and 580mm from enclosing shower walls as illustrated in AS1428.1 (2009), Figure 47a.

c. The minimum dimension of an accessible shower to be 1160 x 1000mm. A folding seat, at a height of 470mm is to be provided. All taps to be located within the height range of 900-1100mm above the finished floor level.

d. Circulation space in front of the shower is to be provided as illustrated in AS1428.1, Figure 47.

Ambulant Toilet Cubicles

Requirements for the ambulant toilets are as follows.

a. Options for the configuration of the ambulant cubicles are illustrated in AS1428.1, Figure 53.

b. Provide an ambulant cubicle within each bank of male and female toilets in compliance with AS1428.1, Clause 16.

c. Minimum width of ambulant cubicles to be 900-920mm.

d. Minimum distance between the front of the WC pan and cubicle door / wall is 900mm,

e. Seat height to be 460-480mm.

f. Provide grabrails to ambulant cubicles to comply with AS1428.1, Clause 17 and Figure 53A.

g. Provide toilet paper holder within the accessible reach zone (within 300mm of the front of the pan at a height less than 700mm).

h. Doors to have a minimum opening width of 700mm and comply with AS1428.1, Figure 53B.

i. Provide signage to the ambulant cubicles to comply with AS1428.1,

Clause 16.4.

Passenger Lifts

The following access requirements apply to the lifts. These requirements are for disabled access only and do not include requirements for stretchers.

a. Lift is to comply with AS1735.12 and be fully automatic

b. Minimum internal dimensions of the lift car to be 1400mm wide x 1600mm deep a lift that travels over 12m or,
Minimum internal dimensions of the lift car to be 1100mm wide x 1400mm deep for a lift that travels less than 12m.

c. Clear opening of the lift door to be minimum 900mm.

d. Provide a handrail complying with the provisions for a mandatory handrail in AS1735.12.

e. All lift control buttons are to be in the accessible height range of 900-1100mm affl and have a minimum 30% luminance contrast to the background colour. This includes buttons within the lift car and at each public lift lobby. All buttons are to be provided with information in Braille and tactile formats.

f. Auditory / voice cues are to be provided within the lift car to assist persons with a vision impairment.

g. Series of door opening devices that will detect a 75mm diameter rod across the door opening between 50 mm and 1550mm above the floor level.

h. Emergency hands-free communication, including a button that alerts a call centre of a problem, a light to signal that the call has been received by the call centre and a light indicating assistance is being dispatched.

Stairs – Internal

Access requirements for public access stairs are as follows and should be addressed during construction to ensure compliance.

a. Stair construction to comply with AS1428.1, Clause 11.1.

b. Stairs to have closed or opaque risers. Open risers cause confusion for persons with a vision impairment and may trigger conditions such as epilepsy due to light penetrating through the open risers.

c. Where the stair intersects with an internal corridor, the stair shall be set back in accordance with AS2418.1 Figure 26C/D to allow adequate space for handrail extensions and tactile indicators.

d. Provide handrails, with extensions, to both sides of the stair (AS1428.1, Clause 11.2). Handrails to have an external diameter between 30-50mm

to assist persons with a manual disability such as arthritis. Handrails should be continuous around the landings where possible.

Handrails are required on both sides of the stair to cater for left and right-handed disabilities. A central handrail is also an acceptable solution where adequate width is available.

Within a school or childcare centre, the stairs are required to have a secondary handrail at a height of 665-750mm per BCA D3D22 (1)(c).

e. Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.

f. Stair nosings shall not project beyond the face of the riser.

g. Provide tactile indicators at the top and bottom of the stair to comply with BCA Clause D4D9 and AS1428.4.1.

Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour. For discrete tactile indicators, 45% luminance contrast is required (60% where two-tone indicators are used).

Accessible Ramps – Internal

AS 1428.1 has access requirements for accessible ramps as follows:

a. Ramp to comply with AS1428.1, Clause 10.3. Maximum allowable gradient of the ramp is 1:14, minimum clear width to be 1000mm and maximum length between landings to be 9m (for 1:14 gradient). Increased circulation areas are required at landings to facilitate wheelchair maneuverability.

b. Accessible ramp is to have a maximum rise of 3.6m (BCA Clause D3D12).

c. Where the intersection is at an internal corridor, the ramp shall be setback by a minimum 400mm so that the handrail complying with Clause 12 does not protrude into the transverse path of travel (AS1428.1, Clause 10.3 (g).

d. Provide handrails, with extensions, to both sides of the ramp to comply with AS1428.1, Clause 12. Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails are required on both sides of the ramp to cater for left and right handed disabilities.

e. Where ramp is not enclosed, provide kerb rails in accordance with AS1428.1. The height of kerb rails is to be less than 65mm or greater than 150mm above the finished surface level. This is to ensure that the foot plate of a wheelchair cannot become lodged on the kerb rail.

f. Provide tactile indicators at the top and bottom of the ramps to comply with BCA Clause D4D9 and AS1428.4. Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators at the top and bottom of the ramps to be 600-800mm deep across the width of the ramp and set back 300mm from the edge of the ramp (refer AS1428.4, Figure A1).

Slip Resistance

The BCA defines the following slip resistance requirements for stairs and ramps:

Application	Surface Conditions	
	Dry	Wet
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or Landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4

Appendix 2 | Best Practice Options for Consideration

We recommend a best practice approach to accessibility that goes beyond minimum standards and embraces the intent of the DDA. The following measures will promote inclusion and participation for all users.

Terminology (Best-practice recommendation)
The use of positive terminology such as "accessible" should be used when referring to accessible facilities such as toilets and carparking. This term is preferable to "disabled" which is commonly used. This principle is to be adopted through the design and documentation of a project and on signage throughout the completed building.

Accessways
We recommend that the accessible path of travel be a minimum 1200mm wide to comply with AS1428.2. Wider pathways will allow easy access for more people who have a permanent disability, people with a temporary disability, people pushing prams and elderly people using walking frames and the like. This is in keeping with the principles of Universal Design. For a wheelchair and a pram to pass 1500mm is required and for two wheelchairs to pass requires 1800mm.

Automatic Entrance Doors
The provision of automatic sliding doorways maximizes access for people with a disability. Further, delivery drivers, people carrying parcels and the elderly also benefit from the provision of automatic doors. Automatic doors provide safe, convenient access for everyone, regardless of age or ability in keeping with universal design principles. They also offer COVID-19 mitigation measures, reducing the transfer of germs and bacteria.

Accessible Service Counters
The provision of an accessible section of counter will benefit people using wheelchairs and people of short stature. AS1428.2 contains access requirements for service counters and recommends the height of the counter be between 750mm (±20) and 850mm (±20) above the finished floor level and have foot and knee clearance under the counter. The minimum width of an accessible counter and clearance below is recommended as 900mm.

Visual Indication to Glazing (additional measures)
To ensure full height glazing that can be mistaken for a doorway is highlighted, we recommend the provision of a "double decal" as per international precedent. This involves the provision of two (2) decal strips that have a minimum 30% luminance contrast to each other. As such, the background colour does not need to be relied upon.

Luminance Contrast

Luminance contrast assists people with a vision impairment to navigate the built environment. Mandatory items within the BCA and AS1428.1 that require luminance contrast are tactile indicators, accessible toilet seats and doorways. Provision of a minimum 30% luminance contrast between the following elements can also be provided as a best practice measure to ensure ease of use:

- between floors and walls or between walls and skirting boards;
- between the ground surface and obstructions such as columns, bollards and street furniture;
- between the floor and the entrance mat, where provided (this allows people with vision impairment to locate the entrance).
- between handrails and mounting surface
- between door and door hardware
- between bathroom fittings and mounting surface

Kitchenette

While not a statutory requirement, the provision of wheelchair accessible benches promotes inclusion. The following recommendations for the dimensioning, layout and arrangement of kitchens are offered to maximize usability for persons with a disability. Some key principles are as follows:

- The height of benches should be between 700-850mm affl noting that no height will suit all users. We recommend a height of 850mm, but note that under bench appliances may not fit.
- Clearance in front of the bench of 1540mm is encouraged to facilitate a 180° turn by a person using a wheelchair
- Acceptable hardware for cupboards includes touch latches and D shaped pull handles.
- A shallow sink is recommended. Optimum bowl depth is 150mm with clearances under as per AS1428.1 requirements for handbasins.
- Provision of taps and instant hot water taps on the side of the sink and within 300mm of the front edge of the bench so as to be within easier reach is recommended.

Workstations and Desks

Consideration should be given to the provision of accessible height workstations. Adjustable height workstations and desks promote an inclusive environment for all users and enable sit-to-stand opportunities, promoting an active workplace.

Seating

A proportion of accessible seating should be provided that offers provides back and arm rests.
A seat height of 450mm is optimal; with arms that extend a further 260mm +/- 40mm in height. · Armrests should not extend beyond the perimeter of the base or legs of the seat to ensure stability of the chair when rising with use of only one armrest.

Seats located adjacent to accessways should be set back at least 600mm to allow leg room without obstructing the adjacent path of travel.

Furniture and Joinery Hardware

The use of D-type pull handles to furniture and joinery that provide a minimum 35mm clearance between the rear face of the handle and the face of the drawer is generally recommended to promote accessibility and inclusion.

Picnic Tables

For accessible picnic tables, the typical bench seating should be omitted to one side to provide a clear space under to facilitate wheelchair access. The height of the table should be between 750mm (±20) and 850mm (±20) per AS1428.2 (1992) requirements for accessible tables / counters generally.

Barbeques

The height of the accessible barbeques should ideally be between 750mm (±20) and 850mm (±20) per AS1428.2 (1992) requirements for accessible kitchen counters generally. Controls should; be located at the front of the cooktop for ease of reach.

Wayfinding – Signage

Signs and symbols should be provided to inform all users. A signage system which informs all users is encouraged. The use of pictograms and directional cues is recommended as is the use of luminance contrast to ensure the message is clear and legible.

Wayfinding – Landmarks and Tactile Indicators

To assist people with vision impairment navigate their environment, the use of directional tactile indicators can be implemented, noting that their use should be minimised. The design of directional tactile indicators is site / building specific.

Additionally, landmarks such as entry features, statues, sculpture, fountains, or other unique features can be used as a means of way-finding throughout a building. This especially assists people with intellectual disabilities.

Accessible Adult Change Facility

While not required within most developments, the provision of an accessible adult change facility promotes inclusion for all users. An Accessible Adult Change Facility is a toilet and change facility that caters for users with high support needs and their carers where they require additional space, assistance and specialised equipment to allow them to use toilets safely and comfortably. Accessible adult change facilities are based on 'Changing Places' that are based on a model developed in the UK.

Emergency Call Button in Sanitary Compartments

If provided, emergency call button should be located at 600+/- 20mm above the finished floor level in front of the toilet roll holder to enable ease of access for someone who has fallen off the pan. People do fall off the pan, in particular those with no or limited upper trunk control.

Fire Egress Doors

We recommend that fire egress doors achieve a clear opening width of 850mm as per doorways within the accessible path of travel.

This permits the use of the landings within fire isolated egress stairs to be used as a shelter in place option for people with disabilities.

Places of Comparative Safety

Consider providing a refuge area within fire isolated stairs by incorporating a 800mm x 1300mm area at stair landings of every accessible floor. A 1000mm unobstructed egress width to the area should be provided.

We recommend that signage displaying the International Symbol of Access (ISA) be provided to identify any places of comparative safety provided. Signage should state that the area is safe in the event of an emergency. Evacuation procedures for the building should address the provision of places of comparative safety for people with limited mobility.

We also recommend that as a part of the emergency evacuation plan for the building, egress for persons requiring assistance be addressed. The provision of places of comparative safety within fire isolated passages would be advantageous to persons with a disability. This consists of a waiting area large enough to accommodate a wheelchair where persons can wait for assistance from emergency services. The waiting area should be identified with appropriate signage that incorporates the International Symbol for Access.

Lighting and Glare

Minimum interior lighting levels should generally consider AS1428.2 (1992) Clause 19. Consistent lighting levels should be provided throughout, without pools of light or dark areas. AS1428.2 (1992) recommends the following minimum illumination levels:

- Entrances 150lx
- Passages and walkways 150lx
- Stairs 150lx
- Toilets and Locker rooms 200lx
- Counter tops 250lx
- General displays 200-300lx

Glare and excessively reflective surfaces should be avoided. This includes glare from windows.

Lockers

The provision of lockers at a suitable height for people using a wheelchair is recommended. The height range for accessible lockers to be 230mm-1350mm AFFL based on the reach ranges prescribed in AS1428.2 (1992).