



Access Report

Mixed Use Development
Cnr Kenrick & Union Streets
THE JUNCTION

For: The Junction Development
Company
Ref: PAA_25231



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:			
Lindsay Perry	Draft	Issued for review	12 March 2026
Lindsay Perry	Revision 1	Issued for SSDA	5 May 2026

Contact Details:

Purple Apple Australia 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	Laure de Vaugelas laure@purpleapple.au 0400 048 855	Lilli Campbell lilli@purpleapple.au

Copyright:

This content of this report, including any intellectual property, remains the property of Purple Apple Australia Pty Ltd and cannot be reproduced without permission.

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

State Significant Development Application documentation for the proposed Mixed Use Development at cnr Kenrick & Union Streets The junction has been reviewed against current accessibility legislation.

The following table summarises our findings.

Item No.	Description	Compliance Status
The Disability (Access to Premises) Standards		
5.1	Access Code	Refer BCA commentary
5.2	New Work & The Affected Part	Not applicable
Access and Approach		
6.1	Allotment Boundary to Entrance	Compliant
6.2	Link between Associated Buildings	Compliant
6.3	Accessible Carparking to Entrance	Compliant
6.4	Accessways (Pathways Generally)	Capable of compliance
6.5	Accessible Carparking	Compliant configuration
6.6	Walkways	Compliant configuration
6.7	Accessible Entrances	Compliant configuration
6.8	Gates	Fit-for-purpose
Interior		
7.1	Extent of Access Generally	Compliant
7.2	Circulation Areas	Compliant
7.3	Doorways	Compliant configuration
7.4	Hearing Augmentation	To be addressed during detailed design
7.5	Exempt Areas	None specified
7.6	Floor Finishes	To be addressed during detailed design
7.7	Carpet	To be addressed during detailed design
7.8	Controls	To be addressed during detailed design
7.9	Visual Indication to Glazing	To be addressed during detailed design
7.10	Tactile Indicators	To be addressed during detailed design
7.11	Signage	To be addressed during detailed design
Sanitary Facilities		
8.1	Distribution	Compliant
8.2	Accessible Toilets	Capable of compliance
8.3	Ambulant Toilet Cubicles	Capable of compliance
8.4	Accessible Showers	Capable of compliance
Vertical Circulation		
9.1	Lifts	Capable of compliance
9.2	Fire Isolated Egress Stairs	Capable of compliance
9.3	Slip Resistance (Ramps & Stairs)	To be addressed during detailed design
Livable Housing Requirements – Silver Level		
10.1	Dwelling Access	Compliant configuration
10.2	Dwelling Entrance	Compliant configuration
10.3	Internal Corridors and Doors	Compliant configuration
10.4	Toilet	Compliant configuration
10.5	Shower	Compliant configuration
10.6	Reinforcement of Bathroom Walls	To be addressed during detailed design

Item No.	Description	Compliance Status
10.7	Internal Stairways	Not applicable
Livable Housing Requirements – Platinum Level		
10.8	Dwelling Access	Compliant
10.9	Dwelling Entrance	Compliant configuration
10.10	Internal Corridors and Doors	Compliant configuration
10.11	Toilet	Compliant configuration
10.12	Shower	Compliant
10.13	Reinforcement of Bathroom Walls	To be addressed during detailed design
10.14	Internal Stairways	Not applicable
10.15	Kitchen Space	Compliant configuration
10.16	Laundry Space	Compliant configuration
10.17	Entry Level Bedroom	Compliant configuration
10.18	Switches and Powerpoints	To be addressed during detailed design
10.19	Door and Tapware	To be addressed during detailed design
10.20	Family / Living Room Space	Compliant
10.21	Window Sills	Compliant
10.22	Flooring	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 Purple Apple Australia Pty Ltd. This may differ from that of other consultants.



LINDSAY PERRY

B.Arch (Hons) | M.DisStud

Access Consultant (ACA Accreditation No. 136)

Internationally Certified Access Consultant ICAC BE-02-106-18

Livable Housing Assessor 20047 | LHDS Assessor LHDS028

NDIS SDA Assessor SDA00049 | Changing Places Assessor CP005

NSW Registered Architect (7021)



1 Project Background

The development involves the demolition of all structures onsite and construction of a seven (7) storey mixed-use development with two (2) basement carparks, retail, commercial and thirty-eight (38) residential units.



Figure 1 | Proposed Development

2 Reviewed Documentation

Documentation prepared by Ode Architecture / SDA has been reviewed as follows:

dwg no.	drawing name	revision
A-1	Title	R.8
A-2	Site Aerial	R.8
A-3	Project Data	R.8
A-4	Site Plan Existing	R.8
A-5	Site Plan Demolition	R.8
A-6	Site Plan Grid Setout	R.8
A-7	Floor Plan Lower Basement	R.8
A-8	Floor Plan Upper Basement	R.8
A-9	Floor Plan Ground	R.10
A-10	Floor Plan Level 1	R.10
A-11	Floor Plan Level 2	R.10
A-12	Floor Plan Level 3	R.10
A-13	Floor Plan Level 4	R.10
A-14	Floor Plan Level 5	R.10
A-15	Floor Plan Level 6	R.10
A-16	Floor Plan Roof	R.10
A-17	Elevations North-East (Kenrick Street)	R.10
A-18	Elevations South-East	R.10
A-19	Elevations South-West	R.10
A-20	Elevations North-West (Union Street)	R.10
A-21	Elevations North-East (Through Site)	R.10
A-22	Elevations South-West (Union Street)	R.10
A-23	Section AA	R.10
A-24	Section BB	R.10
A-25	Section CC	R.10
A-26	Schedule Materials	R.8
A-27	Schedule Windows	R.8



dwg no.	drawing name	revision
A-28	Visual 1	R.8
A-29	Visual 2	R.8
A-30	Visual 3	R.8
A-11	Visual 4	R.8
A-32	Visual 5	R.8
A-33	Visual 6	R.8

3 Council DCP Requirements for Accessibility

While the development is a State Significant Design, the accessibility provisions of the Newcastle Development Control Plan 2023 have been considered.

Section C13 Livable Housing needs to be applied to dual occupancy; attached dwellings, multi dwelling housing, seniors housing, residential flat buildings, co-living housing and shop top housing.

Controls:

C-1. Seniors housing development complies with the requirements of State Environmental Planning Policy (Housing) 2021.

C-2. All other dwellings (except detached dwellings) include the Livable Housing Design Guidelines Silver Level universal design features and demonstrate compliance at design stage and prior to occupation.

C-3. Provision of livable access is to have minimal impact on the significant fabric and setting of heritage items and of contributory buildings within heritage conservation areas.

C-4. For multi dwelling housing, **residential flat buildings, apartments and shop top housing development** resulting in five or more dwellings, at least 20% of dwellings are designed to Platinum Level under the Livable Housing Design Guidelines and demonstrate compliance at design stage and prior to occupation.

C-5. Co-living housing is designed to Platinum Level under the Livable Housing Design Guidelines and demonstrate compliance at design stage and prior to occupation.

C-6. Access to all communal open spaces is provided for people with a disability in accordance with Part 2 Section 7 of AS 1428.

Compliance Summary:

Compliant

Commentary:

The development is deemed to meet the above-mentioned requirements as demonstrated throughout the report.

4 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 2 (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 AS1428.1 (2021) – Design for Access and Mobility
- Australian Standard AS1428.2 (1992) – Design for Access and Mobility: Enhanced and additional requirements – Buildings and facilities
- Australian Standard AS1428.4.1 (2009) Amendment 1 – Design for Access and Mobility: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators
- Australian Standard AS2890.6 (2009) – Parking Facilities – Off street carparking For People with Disabilities.
- Australian Standard AS1735.12 – Lifts, escalators and moving walks: Lifts for persons with a disability
- The Livable Housing Design Guidelines – Edition 4

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.

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 Class 2 buildings – residential component of the development – access for people with disabilities is required:

- From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level.
- To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like.
- Where a ramp complying with AS 1428.1 or a passenger lift is installed—
 - a) to the entrance doorway of each sole-occupancy unit; and
 - b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp.

For Class 5 buildings – commercial component of the development – access for people with disabilities is required to and within all areas normally used by the occupants.

For Class 6 buildings – retail component of the development – access for people with disabilities is required to and within all areas normally used by the occupants.

For Class 7a buildings – carparking component of the development – access for people with disabilities is required to and within any level containing an accessible carparking space.

AS1428 – Design for Access and Mobility

The AS1428 Suite provides design requirements for accessibility generally, covering all types of disabilities. AS1428.1 and AS1428.4.1 are referenced by the NCC / BCA.

AS2890.6 – Off-street Carparking for People with Disabilities

AS2890.6 (2009) applies to the carparking areas generally.

AS1735– Lifts, escalators and moving walks

AS1735.12 (1992) contains requirements for passenger lifts for persons with a disability.

Livable Housing Australia Design Guidelines

The Livable Housing Design Guidelines, 2017 include Silver, Gold and Platinum Level which cater to differing levels of accessibility.

5 The Disability (Access to Premises) Standards

The Disability (Access to Premises – Buildings) Standards 2010 (often called the Premises Standards) were introduced under the Disability Discrimination Act 1992 to ensure that new buildings, and new work on existing buildings, are designed and constructed so that they are accessible to people with disability.

They set out the minimum accessibility requirements that must be met in the design, construction, and certification of new buildings and major renovations in Australia. Their purpose is to ensure that people with disability have equitable, dignified, and safe access to public buildings and facilities. Working in tandem with the Building Code of Australia (BCA), the Premises Standards specify technical provisions such as accessible entrances, paths of travel, ramps, lifts, toilets, signage, car parking, and hearing augmentation.

5.1 Scope of Standards

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 specified Class 1b building, a Class 2 building that has accommodation available for short-term rent or a Class 3, 5, 6, 7, 8, 9 or 10 building (Clause 2.1).

A **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.

5.2 Concessions

The Disability (Access to Premises – Buildings) Standards Section 4 provides a number of concessions as follows:

- Unjustifiable Hardship (clause 4.1)
- Acts under Statutory Authority (clause 4.2)
- Lessee Concession (clause 4.3)
- Lift Concession (clause 4.4)
- Toilet Concession (clause 4.5)

These are not applicable to the proposed development.

5.3 Access Code for Buildings

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.

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

6 BCA | Access and Approach + External Areas Generally

The approach to the building needs to be addressed when considering access for people with disabilities. The BCA has three requirements for the approach to the building with respect to accessibility. 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 Kenrick and Union Streets at the allotment boundary, and
- between building entrances at the ground floor connected by a pedestrian link, and
- from the required accessible carparking space on the allotment

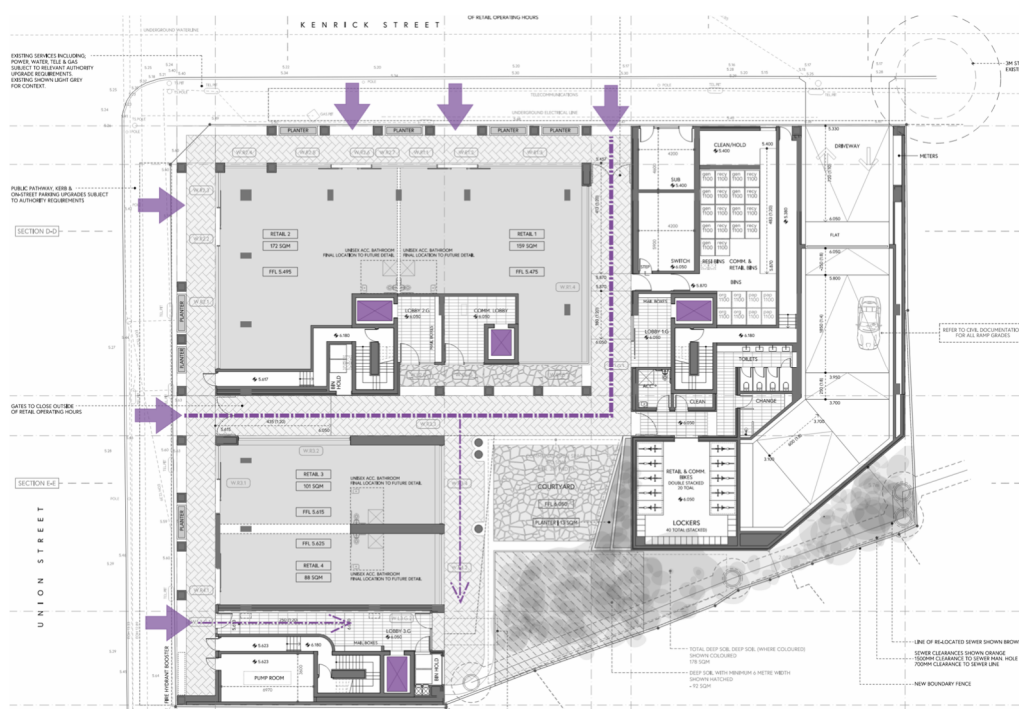


Figure 2 | Overall Site Plan

6.1 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:

Compliant

Commentary:

An accessible path of travel is provided to the building entrances and/or gates along each street frontage. Site levels indicate that on-grade access is achievable.

6.2 Approach from Another Accessible Building

The BCA requires that a continuous accessible path of travel be provided between associated accessible buildings.

Compliance Summary:

Compliant

Commentary:

Level access is available between building entrances at the ground floor level.

6.3 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

Commentary:

Lift access is available from the accessible carparking levels to the building entrance lobbies – level access between the carparking spaces and lifts are also provided.

6.4 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:

Capable of compliance

Commentary:

Footpaths that provide access through and around the site are in excess of 2000mm wide. Site levels indicate a level surface is achievable.

The crossfall of the accessways along the street frontages has a nominated gradient of 1:40 as a minimum that offers a compliant and safe crossfall for accessibility.

6.5 Accessible Carparking

There is a requirement for the provision of accessible carparking within this development to cater for the commercial / retail use. BCA has no requirements for accessible carparking within a residential context. For a commercial (Class 5) building, the BCA requires one (1) accessible carparking space for every one hundred (100) carparking spaces or part thereof. For a retail (Class 6) building, the BCA requires one (1) accessible space for every fifty (50) carparking spaces or part thereof.

Compliance Summary:

Compliant configuration

Commentary:

There is a total of eighty-two (82) carparking spaces within the basement levels as follows:

- Residential carparking – 72 spaces
- Commercial parking – 4 spaces
- Retail carparking – 4 spaces
- Accessible carparking – 2 spaces

One (1) accessible carparking space is provided at each basement level and the configuration achieves compliance with current legislation including dimensions of the space and associated shared areas, chevron markings and provision of a bollard. The number of accessible spaces meets BCA requirements.

6.6 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:

Compliant configuration

Commentary:

Walkways are provided at the ground floor level (2 off) for entry to the site from Union and Kenrick Streets. They offer an accessible path of travel to the building. The nominated gradient is 1:20 and length between landings is less than 7m. Each walkway is enclosed along both sides.

It is noted that there is no level landing provided between the walkway to Kenrick Street and the gate. While AS1428.1 requires level landings at doorways and gates, these gates are to be operated by staff and will be open during retail operating hours. There will be no requirement for independent use of the gates by people other than maintenance staff. As such, the lack of a level landing is considered as an acceptable design solution.

6.7 Accessible Entrances

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:

Capable of compliance

Commentary:

Automatic sliding doors are provided for entrance to the retail tenancies. The use of this type of door is encouraged as it maximizes access generally.

Single hinged doorways provide commercial and residential Lobbies. Compliant circulation areas are generally achieved – ensure that doorway W.LG.1 from Union Street achieves 530mm at the latch side – appears to be currently just under this.

A level threshold hold is achievable at each doorway. Ensure that the selected doors enable a clear opening width of 850mm to all entrance doorways.

6.8 Gates

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

Compliance Summary:

Fit-for-purpose

Commentary:

A single hinged gate provides entry to the shared sanitary facilities at the ground floor level.

Double hinged gates provide entry to the site from Kenrick and Union Streets.

The required circulation areas of AS1428.1 are not achieved however, we note these gates are to be operated by staff and will be open during retail operating hours. There will be no requirement for independent use of the gates by people other than maintenance staff. As such, the current configuration is considered an acceptable design solution.

7 BCA | Interior

The building is designed over seven (7) levels and accommodates four (4) retail tenancies at Ground Floor with commercial areas at Level 1. Residential units complete the development.



The interior areas subject to accessibility requirements include the retail and commercial tenancies and residential common areas being the entry lobbies, and corridors. The following do not apply to individual units.

7.1 Extent of Access Generally – BCA

Within a **residential development** (Class 2), access for people with disabilities is required from a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level.

Where a ramp or a passenger lift is installed, access is required to the entrance doorway of each sole-occupancy unit within the building.

Access is also required to and within not less than 1 of each type of room or space for use in common by the residents.

For a **commercial development** (Class 5), access for people with disabilities is required to and within all areas normally used by the occupants.

For a **retail development** (Class 6), access for people with disabilities is required to and within all areas normally used by the occupants.

Compliance Summary:

Compliant

Commentary:

Access is provided to and within all areas of the retail and commercial uses, to the doorway of each residential unit and to residential common areas.

7.2 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 space has been provided throughout the development. The required wheelchair turning areas are achieved within corridor areas.

7.3 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:

Compliant configuration

Commentary:

Doorways within the accessible path of travel generally achieve the required circulation areas.

Doorways to external areas are required to have a level threshold to facilitate wheelchair access.

We recommend that doorways to individual apartments achieve a clear opening width of 850mm to promote visibility.

7.4 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, and at service counters where the user is screened from the service provider if an inbuilt amplification system, other than the one used for emergency warning is installed.

Compliance Summary:

To be addressed during detailed design as applicable.

7.5 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: plant and service areas generally.

7.6 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

7.7 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.

7.8 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, Clause 10.

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.

7.9 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.

7.10 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).

Compliance Summary:

No requirement within this development.

7.11 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 Clause 5.

Compliance Summary:

To be addressed during detailed design stage.

8 BCA | Sanitary Facilities

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

8.1 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 are required to 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, 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.
- A unisex accessible adult change facility must be provided in some public buildings (not required within this development).

Within a Class 2 building, where sanitary compartments are provided in common areas, not less than one (1) unisex accessible sanitary compartment is required. Where showers are provided in common areas, not less than one (1) accessible unisex shower is to be provided.

Compliance Summary:

Compliant



Commentary:

Each retail tenancy is provided with a unisex accessible sanitary compartment.

Common use sanitary facilities are provided at the ground floor level. The following is provided:

- A unisex accessible sanitary compartment (that includes a shower).
- Ambulant toilet (unisex)

The BCA does not recognise unisex sanitary toilets – including unisex ambulant toilets. However, we note that a unisex facility caters to male and female use as per BCA requirements for ambulant toilets.

8.2 Unisex Accessible Sanitary Compartment

A unisex accessible sanitary compartment that includes a shower is provided within this development.

Compliance Summary:

Capable of compliance

Commentary:

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

8.3 Ambulant Toilet

An ambulant toilet is provided within this development.

Compliance Summary:

Capable of compliance

Commentary:

Overall cubicle dimensions and circulation areas are conducive to compliance with current accessibility legislation.

9 BCA | Vertical Circulation

Lifts provide the main means of access between levels of the building. Stairs within the building are fire isolated egress stairs.

9.1 Passenger Lifts

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:

Four (4) lifts are provided for access between levels.
Three provide access to residential levels, one to the commercial tenancies.

The overall size of each lift shaft is capable of accommodating a lift car of adequate dimensions for compliance with BCA (1100 x 1400mm internal floor area required with 900mm clear opening to door for commercial lift – travels less than 12m) and (1600 x 1460mm internal floor area required with 900mm clear opening to door for residential lifts – travel more than 12m).

Adequate circulation areas are provided at lift landings for wheelchair turning / maneuvering.

Ensure that lift call buttons at landings are not located within 500mm of an internal corner.

9.2 Fire Isolated Egress Stairs

Designated fire egress stairs are not considered public access stairs and therefore are not subject to the requirements of AS 1428.1 with the exception of contrasting nosing strips and handrail requirements. These are required per AS 1428.1.

Compliance Summary:

Capable of compliance

Commentary:

Stairs are provided throughout the development to enable egress in the event of a fire.

We note the provision of offset treads to maintain a constant height along the length of the handrail per AS 1428.1, Clause 9.

9.3 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.

10 Livable Housing Requirements

All residential units within the development have been designed to accommodate the requirements for Livable Housing Australia **Silver Level** with the exception of eight (8) residential units designed to accommodate the requirements for Livable Housing Australia Platinum Level – Unit 101, Unit 103, Unit 201, Unit 203, Unit 301, Unit 303, Unit 401 and Unit 403.

This meets Councils DCP requirements for the provision of platinum level livable housing (20% of all units).

Silver Level LHA Requirements

10.1 Dwelling Access

There is a safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level.

Compliance Summary:

Compliant

Commentary:

It is noted that the BCA requirements for accessibility are in keeping with LHA silver level requirements for dwelling access.

10.2 Dwelling Entrance

There is at least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.

Compliance Summary:

Compliant configuration

Commentary:

Entrances offer shelter and the required landing area (1200x1200mm). Door sizes and threshold details to be addressed during detailed design.

10.3 Internal Corridors and Doors

Internal doors and corridors facilitate comfortable and unimpeded movement between spaces.

Compliance Summary:

Compliant configuration

Commentary:

Corridors offer adequate clear width (1000mm between skirting boards is achievable).

Door sizes to enable 820mm clear opening to be addressed during detailed design.



10.4 Toilet

The ground (or entry) level has a toilet to support easy access for home occupants and visitors.

Compliance Summary:

Compliant

Commentary:

There is a toilet within each unit that is located in the corner of the room with 900x1200mm circulation area in front of the pan.

10.5 Shower

The bathroom and shower are designed for easy and independent access for all home occupants.

Compliance Summary:

Compliant

Commentary:

There is a shower within each unit that is located in the corner of the room and offer step free access.

10.6 Reinforcement of Bathroom & Toilet Walls

The bathroom and toilet walls are built to enable grabrails to be safely and economically installed.

Compliance Summary:

To be addressed during detailed design stages.

10.7 Internal Stairways

Where installed, stairways are designed to reduce the likelihood of injury and also enable future adaptation.

Compliance Summary:

Not applicable to this development

Platinum Level LHA Requirements

10.8 Dwelling Access

There is a safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level.

Compliance Summary:

Compliant

Commentary:

It is noted that the BCA requirements for accessibility are in keeping with LHA platinum level requirements for dwelling access. The additional width to accessways for platinum level (1200mm minimum) has been achieved in the design.

10.9 Dwelling Entrance

There is at least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.

Compliance Summary:

Compliant configuration

Commentary:

Entrances offer shelter and the required landing area (1500x1500mm). Door sizes and threshold details to be addressed during detailed design noting that a clear opening width of the doorways is to be 900mm.

10.10 Internal Corridors and Doors

Internal doors and corridors facilitate comfortable and unimpeded movement between spaces.

Compliance Summary:

Compliant configuration

Commentary:

Corridors achieve adequate clear width (1200mm clear is required between skirting boards) for compliance.

Door sizes and threshold details to be addressed during detailed design noting that a clear opening width of the doorways is to be 900mm.

10.11 Toilet

The ground (or entry) level has a toilet to support easy access for home occupants and visitors.

Compliance Summary:

Compliant configuration

Commentary:

The toilet pan within each platinum unit is located in the corner of the room. It is noted that the required 1200x1200mm circulation area in front of the pan is achieved within all eight units.

Set-out requirements for the WC pan are to be addressed during detailed design.

10.12 Shower

The bathroom and shower are designed for easy and independent access for all home occupants.

Compliance Summary:

Compliant

Commentary:

There is a shower within each unit that is located in the corner of the room is 1160x1100mm with the required 1400x1600mm forward of the shower recess.

Requirements for slip resistance are to be addressed during detailed design.

10.13 Reinforcement of Bathroom & Toilet Walls

The bathroom and toilet walls are built to enable grabrails to be safely and economically installed.

Compliance Summary:

To be addressed during detailed design

10.14 Internal Stairways

Where installed, stairways are designed to reduce the likelihood of injury and also enable future adaptation.

Compliance Summary:

Not applicable

10.15 Kitchen Space

The kitchen space is designed to support ease of movement between fixed benches and to support easy adaptation.

Compliance Summary:

Compliant configuration

Commentary:

The L-shaped design of the kitchens facilitates the required circulation areas.

Requirements for floor to be slip resistance and task lighting is to be addressed during detailed design.

10.16 Laundry Space

The laundry space is designed to support ease of movement between fixed benches and to support easy adaptation.

Compliance Summary:

Compliant

Commentary:

The required 1550mm is provided in front of fixed benches and appliances.

Requirements for floor to be slip resistance is to be addressed during detailed design.

10.17 Entry Level Bedroom

There is a space on the ground (or entry) level that can be used as a bedroom.

Compliance Summary:

Compliant

Commentary:

Required circulation areas are shown hatched on the floor plans.

10.18 Switches and Powerpoints

Light switches and powerpoints are located at heights that are easy to reach for all home occupants.

Compliance Summary:

To be addressed during detailed design

10.19 Door and Tap Hardware

Home occupants are able to easily and independently open and close doors and safely use tapware.

Compliance Summary:

To be addressed during detailed design

10.20 Family / Living Room Space

The family / living room features clear space to enable the home occupant to move in and around the room with ease.

Compliance Summary:

Compliant

Commentary:

The required circulation areas (2250mm dia) are shown dashed on the floor plans free of the furniture arrangement.



10.21 Window Sills

Window sills are installed at a height that enables home occupants to view the outdoor space from either a seating or standing position.

Compliance Summary:

Compliant

Commentary:

Bedroom and living areas within the platinum units have full height glazing.

10.22 Flooring

Floor coverings are slip resistant to reduce the likelihood of slips trips and falls in the home.

Compliance Summary:

To be addressed during detailed design

11 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, demonstrate 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 2.3). 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 3.4.
- f. Grated drains within the accessible path of travel are to have circular openings no greater than 13mm in diameter and slotted openings not greater than 13mm wide and not longer than 150mm – 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 7.2). 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 7.2).
- 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 180°, landings to be 1540mm in length – refer to AS1428.1, Clause 7.8.

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 800 and 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 stripes 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.

Accessible Entrances

Access requirements for entrances are as follows.

- a. Not less than 50% of all pedestrian entrances including the principal pedestrian entrance must be accessible.

- b. Entrance to comply with AS1428.1, Clause 10 as part of the accessible path of travel.
- c. Doors are to have a minimum clear opening width of 850mm to comply AS1428.1, Clause 10.2 as part of the accessible path of travel (measured from the face of the opened door to the doorstep per AS1428.1, clause 10.2).
- d. 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 5mm where beveled edges are provided between surfaces.
- e. Door to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1, Clause 10.5)
- f. 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 3.6.
- g. 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.
- h. 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.

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 (measured from the face of the opened door to the doorstep per AS1428.1, clause 10.2). For hinged doors, we recommend the use of a 920mm leaf door as a minimum to achieve



adequate clear width, **unless it is a fire or smoke door**, in which case 970mm leaf minimum is usually required. For sliding doors, a 1020mm minimum leaf is required to accommodate the 850mm opening, door D-Pull handle, and 60mm clearance each side of the handle.

For double doors, the dominant leaf must achieve this 850mm clear opening width to facilitate single leaf operation. The NCC D4D3 requires where a doorway on an accessway has multiple leaves (except an automatic opening door), one of those leaves must have a clear opening width of not less than 850 mm in accordance with AS 1428.1.

- b. All doorways within the accessible path of travel to have complying circulation areas as illustrated in AS1428.1, Figure 31 & 32. 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, Clause 10.1.
- e. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1), Clause 10.5). 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, Clause 10.5.1. 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 500mm and 1000mm 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, 5mm where beveled edges are provided between surfaces.
- i. Doorways to have operational forces per AS1428.1, Clause 10.5.2. A maximum allowable force of 20N is required to operate the door.

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 4.2 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, Clause 11.

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 in level of 1000mm or more (a balustrade system)

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. 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, Clause 12 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 800-820mm.
- 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 12.2.4.

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.

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 12.5 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, 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 52.
- b. Provide an ambulant cubicle within each bank of male and female toilets in compliance with AS1428.1, Clause 12.

- 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 12 and Figure 52A.
- 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 12.4.

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 (1999) 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. Lift call buttons at landings are to comply with AS1735.12 1999. This includes; the centre of buttons shall not be less than 900mm or more than 1200mm affl and not within 500mm of an internal corner. They are to either have continuous illumination from within the button, or a minimum 30% luminance contrast to the background colour. All buttons are to be provided with information in Braille and tactile formats.
- f. Lift call buttons within the lift car are to comply with AS1735.12 1999. This includes; the centre of buttons shall not be less than 700mm or more than 1250mm affl and not within 300mm of an internal corner if adjacent the opening, or 400mm for all other locations. They are to either have continuous illumination from within the button, or a minimum 30% luminance contrast to the background colour. All buttons are to be provided with information in Braille and tactile formats.

- g. Auditory / voice cues are to be provided within the lift car to assist persons with a vision impairment.
- h. 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.
- i. 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.

Fire Isolated Egress Stairs

Designated fire egress stairs are not considered public access stairs and therefore are not subject to the requirements of AS1428.1 with the exception of contrasting nosing strips and handrail requirements. These are required per AS1428.1.

- a. 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.
- b. Stair nosings shall not project beyond the face of the riser.
- c. Handrails in a required exit serving an area required to be accessible, are to be designed and constructed to comply with AS 1428.1, Clause 9

Note: handrails within fire-isolated stars are required to one side only and do not require the provision of handrail extensions. They must have a diameter between 30-50mm; be between 865-1000mm high above the nosing; be a consistent height along the length of the stair – no vertical sections; have a clearance to the wall not less than 50mm; have no obstruction along the length of its passage; and have an end that turns through 180, turns to the ground, or returns fully to an end post.

We recommend the use of the staggered stair to maintain a constant height along the length of the handrail.

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

Livable Housing – PLATINUM LEVEL

Livable housing requirements – Platinum Level – are summarised below:

Dwelling Access

There is a safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level.

- Path of travel should be minimum 1200mm wide with no steps; an even, slip resistant surface; crossfall not more than 1:40; and maximum slope of 1:14.
- Where ramps are required, landings at 9m intervals are to be provided and are to be not less than 1200mm in length.
- Where a carparking space is relied upon as the safe and continuous pathway to the dwelling, it should be at least 3200mm wide...
- Step ramps where provided to have a maximum gradient of 1:10, clear width of 1000mm and maximum length of 1900mm.
- Where ramps adjoin gates or doorways, landings no less than 1200mm in length, exclusive of the door swing, are required.
- Vertical clearance of 2500mm over any carpark required.
- Carparking where provided to be 38000x6000mm

Dwelling Entrance

There is at least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.

- Entrance doors to have a clear opening width of 900mm and have a level transition (5mm allowable tolerance – where in excess of 5mm, threshold ramp up to 56mm high is allowable).
- Reasonable shelter from the weather is required.
- 1500x1500mm level landing area required on the arrival side of the door.

Internal Corridors and Doors

Internal doors and corridors facilitate comfortable and unimpeded movement between spaces.

- Doorways on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes to have a clear opening with of 900mm and level transition between surfaces (5mm allowable tolerance).
- Corridors to be 1200mm wide.

Toilet

The ground (or entry) level has a toilet to support easy access for home occupants and visitors.

- A toilet on the ground / entry floor is required to have a circulation area in front of the toilet pan 1200x1200mm.
- Toilet pan is to be provided in a corner of a room.
- Toilet pan to be 450-460mm from the side wall and a minimum clearance of 600mm to be provided forward of the cistern to the front of the toilet seat. Seat height to be 460-480mm.



Shower

The bathroom and shower are designed for easy and independent access for all home occupants.

- A bathroom is required to have a non-slip hobless shower, located on the corner of the room.
- Shower to be 1160x1100mm minimum with clear space at least 1400x1600mm forward of the shower recess.

Reinforcement of Bathroom & Toilet Walls

The bathroom and toilet walls are built to enable grabrails to be safely and economically installed.

- Walls to enable safe installation of grabrails to toilet, bath and shower.
- Reinforcement to be in the form of 25mm noggins or plywood sheeting with 12mm thickness.

Internal Stairways

Where installed, stairways are designed to reduce the likelihood of injury and also enable future adaptation.

- Stairs to have a continuous handrail to one side of the stair where the rise is greater than 1m.
- Stairs to be minimum 1000mm wide and be of straight design.
- Stairs to have enclosed risers, continuous handrails to both sides of the stair and minimum 1200x1200mm landing areas at the base and top of the stairs.

Kitchen Space

The kitchen space is designed to support ease of movement between fixed benches and to support easy adaptation.

- Provide at least 1550mm clearance in front of fixed benches and appliances.
- Provide slip resistant flooring.
- Provide task lighting above workspaces.

Laundry Space

The laundry space is designed to support ease of movement between fixed benches and to support easy adaptation.

- Provide at least 1550mm clearance in front of fixed benches and appliances.
- Provide slip resistant flooring.

Entry Level Bedroom

There is a space on the ground (or entry) level that can be used as a bedroom.

- Bedroom to be at least 10sqm exclusive of wardrobes and skirtings.
- Provide at least 1000mm wide circulation to one side of bed.
- Provide a space of at least 1540x2070mm in the direction of travel on the side of the bed that is closest to the door.

Switches and Powerpoints

Light switches and powerpoints are located at heights that are easy to reach for all home occupants.



- Provide light switches at 900-1100mm high – horizontally aligned with door handles.
- Powerpoints to be not less than 300mm above the floor level.
- Switches and powerpoints to be rocker action, toggle or push pad design with a width of 35mm.

Door and Tap Hardware

Home occupants are able to easily and independently open and close doors and safely use tapware.

- Provide door hardware at 900-1100mm high.
- D-pull style or level door hardware to be provide.
- Basins, sinks and tubs should offer lever or capstan style taps with a central spout.

Family / Living Room Space

The family / living room features clear space to enable the home occupant to move in and around the room with ease.

- A free space 2250mm diameter to be provided to enable ease of movement.

Window Sills

Window sills are installed at a height that enables home occupants to view the outdoor space from either a seating or standing position.

- Window sills on the ground / entrance floor on living rooms and bedroom spaces to be positioned no higher than 1000mm above the floor level.
- Window controls to be easy to operate with one hand and located within easy reach.

Flooring

Floor coverings are slip resistant to reduce the likelihood of slips trips and falls in the home.

- All floor coverings to be firm, even and slip resistant.
- Level transition between abutting surfaces to be provided (5mm tolerance allowable).



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 and have been developed with consideration to the principles of Universal Design, enhanced Australian Standards for accessibility, industry partner accessibility and inclusion guidelines and international legislation.

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. For a wheelchair and a pram to pass 1500mm is required and for two wheelchairs to pass requires 1800mm. 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.

Resting areas should be provided at 60m intervals along the accessway in keeping with AS1428.2 and include seating and wheelchair spaces.



Accessible Carparking

While there are mandatory requirements for the configuration and number of accessible car parking spaces within a development, there are no requirements around location or shelter. Going beyond minimum compliance to promote usability, dignity, and independence for people with disabilities is encouraged.

We recommend that accessible carparking be located as close to the building entrance as possible without the need to cross lanes of traffic.

Consideration should also be given to the provision of undercover accessible carparking. This offers protection from rain, heat, and wind, improving comfort and safety during entry and exit from vehicles and when travelling to the building entrances. It also reduces risk of slips or falls on wet or hot surfaces. The provision of undercover access between carparking and entrances aligns with universal design principles by offering equitable amenity and comfort.

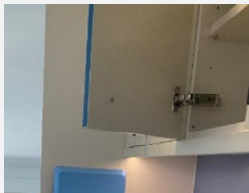
Adequate, uniform lighting, especially for after-hours access and safety, that minimises glare or shadows near circulation paths is another factor for consideration.

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.

Luminance Contrast

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 the door and door hardware		between bathroom fittings and the mounting surface
	between overhead cupboard doors and exposed edge when cupboard doors are open		between cupboard doors and handles; between cupboard doors and floor; between cupboard doors and benchtops; between benchtop and sink;

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.

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.



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.

Where seats are located adjacent to accessways:

The seat should be set back at least 600mm to allow leg room without obstructing the adjacent path of travel. 	A paved area provided to one side of the bench will allow a person using a wheelchair to either transfer onto the seat or sit next to the seat without obstructing the path of travel. This area also provides an area to park bikes and/or prams to keep the main path of travel clear	Note - the use of a contrasting material between the main path and the seating area aids with visual identification of the walkway. 
--	--	--

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.

Doors to Residential Apartments

We recommend that doors that provide entry of residential apartments achieve a clear opening width of 850mm as per doorways within the accessible path of travel. This promotes visitability and aids in the moving of furniture to and from the apartment.

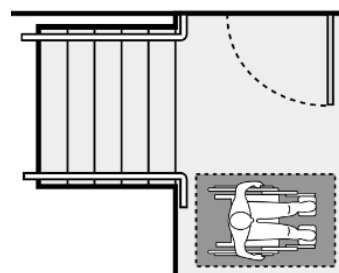
Fire Egress Doors

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 an 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.

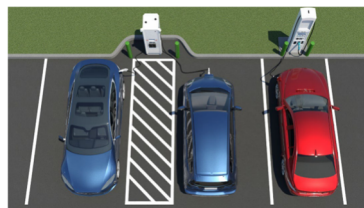
Lighting and Glare

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

Electric Vehicle Charging Stations

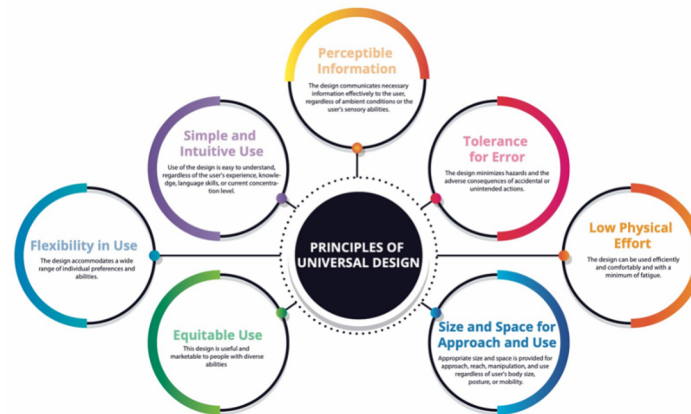
An accessible electric vehicle (EV) charger ensures that people with disabilities—including drivers or passengers who use wheelchairs, have limited mobility, or sensory impairments—can independently use EV charging infrastructure.

Key features should include a clear floor areas adjacent to the charger to facilitate a wheelchair turning area (1540x2070mm); kerb-free / step-free access; reachable controls (within the accessible height range and not within 500mm of an internal corner); a level non-slip surface; lightweight cables; adequate lighting accessible user interface and visual status indicators, like the status of ev charging, should also be discernible by sound (or touch)



The Principles of Universal Design

At the Center for Universal Design at North Carolina State University, a group of architects, product designers, engineers, and environmental design researchers established the following set of principles of universal design to provide guidance in the design of environments, communications, and products. We recommend that they be implemented within the design of the built environment.



Equitable Use

The design is useful and marketable to people with diverse abilities. For example, a website that is designed so that it is accessible to everyone, including people who are blind, employs this principle.

Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Tolerance for Error

The design minimises hazards and the adverse consequences of accidental or unintended actions.

Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

Size and Space for Approach and Use

Appropriate size and space are provided for approach, reach, manipulation, and use regardless of the user's body size, posture, or mobility.

