



Disability Access Report - SSD

HCDD Stage 1A
16B Honeysuckle Drive
NEWCASTLE NSW

For: University of Newcastle
c/- EJE Architecture
Ref: LP_18086



Executive Summary

Architectural documentation for the HCDD Stage 1A, located at 16B Honeysuckle Drive Newcastle has been reviewed against the requirements of the Building Code of Australia 2016 and The Disability Discrimination Act 1992 with regard to access for persons with a disability. The requirements of the Disability Standards for Access to Premises (Buildings) and the Access Code for Buildings have also been addressed.

We consider that the drawings presented for assessment, for the purposes of a state significant development application, generally comply with The Building Code of Australia 2016 and the intent of the Disability Discrimination Act 1992, subject to the recommendations made in this report being implemented during the construction process.

The following table summarises compliance status.

Item No.	Description	Compliance Status
Access and Approach		
3.1	Approach from Street Boundary	Compliant
3.2	Pathways	Capable of compliance
3.3	Entrance	Capable of compliance
Interior		
4.1	Extent of Access Generally	Compliant
4.2	Circulation Areas	Capable of compliance To be addressed during detailed design
4.3	Doorways	Capable of compliance To be addressed during detailed design
4.4	Service Counters	Best Practice recommendation only
4.5	Hearing augmentation at Service Counters	To be addressed during detailed design
4.6	Hearing Augmentation	To be addressed during detailed design
4.7	Exempt Areas	Compliant
4.8	Floor Finishes	To be addressed during detailed design
4.9	Carpet	To be addressed during detailed design
4.10	Controls	To be addressed during detailed design
4.11	Visual Indication to Glazing	To be addressed during detailed design
4.12	Tactile Indicators	To be addressed during detailed design
4.13	Signage	To be addressed during detailed design
4.14	Thresholds	To be addressed during detailed design
4.15	Slip Resistance	To be addressed during detailed design
4.16	Luminance Contrast	Best Practice recommendation only
4.17	Changing Places	Best Practice recommendation only
Sanitary Facilities		
5.1.	Distribution	Capable of compliance To be addressed during detailed design
5.2	Accessible Toilets	Capable of compliance
5.3	Accessible Showers	Capable of compliance
5.4	Ambulant Toilet Cubicles	To be addressed during detailed design



Vertical Circulation		
6.1	Lifts	Capable of compliance
6.2	Stairs	Capable of compliance
6.3	Fire Egress Stairs	Capable of compliance

Construction is to be in accordance with the recommendations made in this access report to ensure compliance. Where construction differs from the drawings, further assessment will be required to ascertain compliance.

This report is limited to items within drawings listed in this report only. Future alterations and additions to the building will render the recommendations in this report null and void as we cannot guarantee continued compliance where changes to the building fabric are made. A high level of maintenance is recommended to ensure continued compliance with access legislation.

All dimensions quoted throughout this report and within Australian Standards are CLEAR dimensions, not structural. This needs to be considered in the preparation of the construction certificate documentation to account for wall linings and the like.

Best practice options, as noted in the report, are not mandatory but will minimise the risk of a complaint made under the DDA.

The recommendations throughout this report reflect the professional opinion and interpretation of Lindsay Perry. This may differ from that of other consultants. We aim to provide practical, performance-based advice based on project specifics that will maximize access for persons with a disability to the built environment.

Lindsay Perry is a qualified Access Advisor, being an accredited within Australia (ACAA No. 136) and at the international level (GAATES No. BE-02-106-18). Lindsay Perry Access Pty Ltd carries public liability insurance, professional indemnity insurance and workers compensation insurance.

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Revision Summary

Date	Description	Revision
12 Feb. 2019	Disability Access Report – SSD	1



1. Project Background

This Access Report considers the HCDD Stage 1A building, located at 16B Honeysuckle Drive Newcastle, against the requirements of the Building Code of Australia 2016 (BCA), Disability (Access to Premises) Standards 2010 and The Disability Discrimination Act 1992 (DDA), with regard to access for persons with a disability.

The proposed building is a four-storey commercial / education building providing approximately 3000sqm of floor area. The main entrance is from Worth Place on the western side of the building. Lifts provide access between all levels of the building and accessible amenities are located at each level.

A range of teaching spaces are provided within the building including studios, seminar areas, and social areas. Staff workplaces are provided at Level 3 in a combination of open plan, medium size and large offices. Quiet rooms, meeting rooms and a reception area are also provided.

Documentation prepared by EJE Architecture has been reviewed as follows:

- SD A-000 B Cover Sheet
- SD A-010 A Site Plan
- SD A-011 B Landscape Plan
- SD A-030 Shadow Diagrams
- SD A-100 M Ground Floor Plan
- SD A-100A F Mezzanine Plan
- SD A-101 L Level 1 Plan
- SD A-102 L Level 2 Plan
- SD A-103 L Level 3 Plan
- SD A-104 E Plant Level Plan
- SD A-107 B Roof Plan
- SD A-200 F West Elevation
- SD A-201 F North Elevation
- SD A-202 F South Elevation
- SD A-203 F East Elevation
- SD A-300 A Sections – Sheet 1
- SD A-301 Sections – Sheet 2
- SD A-330 A Sectional Perspective

It is estimated that one in five people in Australia have a long-term disability (Australian Bureau of Statistics – 2003). This includes physical disability, intellectual disability, and sensory impairments such as vision and hearing. It does not include those with a short-term (temporary) disability or the continuing aging population.

Lindsay Perry Access have adopted a best practice, performance-based approach to access. Assessment is based on project specifics and takes into account various factors such as site topography, heritage and existing site conditions.



2. Legislation

The requirements of BCA 2016 have been adopted in the preparation of this access report.

Access assessment has been made against Access Legislation including:

- The Commonwealth Disability Discrimination Act 1992 (DDA)
- Disability (Access to Premises (Buildings)) Standards 2010
- Access Code for Buildings 2010
- The Building Code of Australia 2016 (BCA) Section D3 – Access for People with Disabilities
- The Building Code of Australia 2016 (BCA) Section D2 (in part) – thresholds and slip resistant
- The Building Code of Australia 2016 (BCA) Section E3.6 – Lifts
- Australian Standards AS1428.1(2009) Amendment 1, AS1428.2(1992), AS1428.4(2009) – Design for Access and Mobility
- Australian Standard AS1735.12 – Lifts, escalators and moving walks: Lifts for persons with a disability

The accessibility of the proposed development has been considered in regard to the relevant access legislation. A summary of the requirements of relevant legislation follows.

- 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 DDA is a complaint-based law and is administered by the Human Rights and Equal Opportunities Commission
- The **DDA Premises Standards** include an **Access Code** written in the same style as the Building Code of Australia. That is, the Access Code has a number of Performance Requirements that are expressed in broad terms and references to a number of technical Deemed-to-Satisfy Provisions. The Deemed-to-Satisfy provisions refer in many cases to technical details in Australian Standards such as AS1428.1, the primary Australian Standard relating to building access for people with a disability.
 - The **BCA 2015 for Class 5 commercial buildings** requires access for people with disabilities to and within all areas normally used by the occupants.
 - The **BCA 2016 for Class 9b educational buildings** requires access for people with disabilities to and within all areas usually used by the occupants and to wheelchair seating spaces provided in accordance with D3.9. Access need not be provided to every tier / platform within an auditorium.
- **AS1428 – Design for Access and Mobility** requires the inclusion of a continuous accessible path of travel from the street footpaths and carparking areas to the entry and facilities within the building. It also includes requirements for doorways, stairs, toilets, etc.



Part 1 (2009) of this standard contains access requirements that are mandatory for the provision of access for persons with a disability and is referred by the BCA. Amendment 1 of this document was released in 2010.

Part 2 (1992) provides enhanced and best practice requirements.

Requirements for tactile indicators are included in Part 4.1 (2009) of this standard.

Part 5 (2010) provides requirements for Communication for people who are deaf or hearing impaired but is not referenced by the BCA.

- **AS1735.12** contains requirements for passenger lifts for persons with a disability.

3. Access and Approach

The approach to the building needs to be considered 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 allotment boundary at the main points of pedestrian entry, from accessible carparking areas and from any adjacent and associated accessible building.

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

- from the allotment boundary at the pedestrian entrance along Worth Place to the entrance;

There are no associated buildings or carparking within the development site.

3.1 Approach from Street 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

Level access is available from Worth Place to the building entrance.

3.2 Pathways Generally

The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS1428. The accessible path of travel promoted inclusion for all building users.

Compliance Summary:

Capable of compliance



Recommendations:

For compliance with AS1428.1, the following access requirements apply and should be addressed during detailed design stages to ensure compliance.

We confirm that the pedestrian areas appear to be conducive to the provision of access for persons with a disability.

- 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.

3.3 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.

An automatic sliding door is provided for entrance to the building. The use of this type of door is encouraged as it maximizes access for persons with a disability.

Compliance Summary:

Capable of compliance

Recommendations:

The following access requirements apply to the entrance and should be addressed during detailed design stages to ensure compliance.

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



- b. Door 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.

4 Interior

The interior areas subject to accessibility requirements include all areas usually used by the occupants as per BCA requirements.

4.1 Extent of Access Generally – BCA

Accessibility provisions of the BCA have generally been met. Access is provided to and within the building.

Compliance Summary:

Compliant

4.2 Circulation Areas

BCA (Clause D3.3) requires the provision of turning spaces and passing areas to corridors to enable wheelchair circulation throughout a building.

Compliance Summary:

To be addressed during details design.

The provision of 1200 / 1400mm wide corridors at the Ground Floor Level / Level 1 respectively does not achieve the required wheelchair circulation areas.

Recommendations:

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



4.3 Doorways Generally

AS1428 has requirements for doorways within the accessible path of travel to enable independent access for people using a wheelchair.

Compliance Summary:

To be addressed during detailed design stages.

Some sliding doors to offices do not achieve adequate latch side compliance. We note that this can be addressed through the design of the door hardware.

Recommendations:

Access requirements for doorways within the accessible path of travel are as follows and should be addressed during detailed design stages to ensure compliance

- 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.

- 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. Doorways to have minimum 30% luminance contrast as described in AS1428.1(2009), Clause 13.1.
- d. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5).

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.

- e. 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.

4.4 Accessible Counters (Best-practice recommendation)

Service counters are provided throughout the building. For example, Concierge at the Ground Floor, Reception at Level 3. The provision of an accessible section of counter will benefit people using wheelchairs and of short stature.

Access requirements for service counters are contained in AS1428.2. AS1428.2 provides enhanced requirements for accessibility but is not mandatory. Compliance with this clause will offer protection from a complaint made under the DDA. Access requirements for the accessible reception counter, if provided, are as follows.



- a. Accessible counters to comply with AS1428.2, Clause 24.1. Height of the counter is to be between 750mm(± 20) and 850mm (± 20) above the finished floor level and have foot and knee clearance under the counter as outlines in Figure 25. The minimum width of the accessible counter and clearance below is 900mm.

4.5 Hearing Augmentation at Service Counters

For buildings that are required to be accessible, the BCA (Clause D3.7) 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.

Requirements for hearing augmentation are contained in AS1428.5: Communication for People who are deaf or Hearing impaired. This standard is not referenced by BCA however, we recommend that the requirements of AS1428.5 be adopted in the provision of hearing augmentation.

Compliance Summary:

To be addressed during detailed design.

Recommendations:

- a. Hearing augmentation at service counters to comply with AS1428.5, Clause 3.4 which recommend that provision of an assisted listening system (ALS). Specifications for the ALS are provided in AS1428.5, Clause 4.3.
- b. The hearing augmentation system is to be identified using the International Symbol for Deafness – refer to AS1428.5, Clause 5.1 – and displayed at the reception counters.

4.6 Hearing Augmentation

For buildings that are required to be accessible, the BCA (Clause D3.7) 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.

Requirements for hearing augmentation are now contained in AS1428.5: Communication for People who are deaf or Hearing impaired. This standard will not be referenced by BCA. However, we recommend that the requirements of AS1428.5 be adopted in the provision of hearing augmentation within the building.

Compliance Summary:

To be addressed during detailed design.

Recommendations:

- a. Provide hearing augmentation as required by BCA.
- b. The hearing augmentation system is to be identified using the International Symbol for Deafness.



4.7 Exempt Areas

BCA Clause D3.4 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.

In this instance, the following areas are considered exempt areas: plant rooms, service areas, cleaners' rooms and the like.

4.8 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. This should be implemented during construction to ensure compliance.

Compliance Summary:

To be addressed during detailed design stages.

4.9 Carpet

AS1428.1 has access requirements for carpet. Where **new** carpet is used as the floor surface, pile height should not exceed 4mm. Exposed edges will be fastened to the floor surface. Carpet trims shall have a vertical face not more than 3mm high.

Compliance Summary:

To be addressed during detailed design stage.

4.10 Controls

New controls such as light switches, GPOs, alarm keypads, card swipes, intercoms, 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. This should be implemented during construction to ensure compliance.

Compliance Summary:

To be addressed during detailed design stage.

4.11 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. AS1428.1, Clause 6.6.

Compliance Summary:

To be addressed during detailed design stage.

4.12 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 D3.8).

The use of tactile indicators should be minimized through good design.

Tactile indicators are generally required to be 600-800mm deep across the width of the hazard and set back 300mm from the edge of the hazard (refer AS1428.4.1, Figure A1). 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.

4.13 Signage

Signage to identify sanitary facilities, hearing augmentation and required exits are to be provided in accordance with BCA Clause D3.6. This includes provision of the International Symbol for Access or International Symbol for Deafness as appropriate. Signage to comply with AS1428.1 (2009), Clause 8.

Compliance Summary:

To be addressed during detailed design stage.

Recommendations:

Signage to include information in Braille and tactile signage formats as outlined within BCA Specification D3.6.

- a. Braille and tactile components of the sign to be located not less than 1200mm and not higher than 1600mm affl.
- b. Signage identifying rooms with accessible features or facilities nominated in Clause D3.6 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. This is to allow use of the Braille without obstructing pedestrian traffic through the doorway.
- c. For signage identifying an exit, "exit" and the level must be stated on the sign. It must 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.

4.14 Thresholds

The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless in a building required to be accessible by Part D3, the doorway opens to a road or open space; and is provided with a threshold ramp or step ramp in accordance with AS 1428.1.



Compliance Summary:

To be addressed during detailed design stages.

4.15 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

Compliance Summary:

To be addressed during detailed design stage.

4.16 Luminance Contrast (Best-practice recommendation)

Luminance contrast assists people with a vision impairment to navigate the built environment. Mandatory items that require luminance contrast are tactile indicators, accessible toilet seats and doorways as outlined in other sections of this report.

The following can also be provided as a best practice measure to ensure ease of use:

- Minimum 30% luminance contrast between floors and walls;
- Minimum 30% luminance contrast between the ground surface and obstructions such as columns, bollards and street furniture;
- Minimum 30% luminance contrast between the floor and the entrance mat (this allows people with vision impairment to locate the entrance);
- Minimum 30% luminance contrast between walls and handrails.

4.17 Changing Places (Best-practice recommendation)

Changing places offer safe and clean toilets for use by people with severe disabilities and should be located within major public buildings, transport interchanges and recreational areas. Key design principles include a ceiling hoist, circulation areas to allow for up to two assistants and fully adjustable adult change table. Further information can be retrieved from changingplaces.org.au

We note that the introduction of a requirement for adult change facilities within the BCA 2019 (clause F2.9) is not applicable to this development.



5 Sanitary Facilities

The BCA / Access Code for Buildings (Clause F2.4) require the provision of sanitary facilities catering for persons with a disability.

5.1 Distribution of Accessible Sanitary Facilities

The following is required to satisfy BCA requirements:

- A unisex accessible toilet at each level. Where more than one bank of toilets is provided at any level, at least 50% of those banks will have an accessible toilet facility.
- A unisex accessible shower is required where showers are required by F2.3. In this regard, BCA only requires accessible showers within hospitals, early childhood centres, theatres and sporting venues. Showers are not *required* within commercial, retail or industrial premises. If **required by Clause F2.3**, where one or more showers are provided, 1 accessible shower for every 10 or part thereof must be provided.
- To minimize the risk of a complaint made under the DDA, we recommend that where showers are provided for general use, an accessible shower should be provided.
- At each bank of toilets where there is one or more toilets in addition to an unisex accessible sanitary compartment at the bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS1428.1 must be provided for use by males and females

Compliance Summary:

Capable of compliance

We note the provision of a unisex accessible toilet at each level of the building.

An accessible shower is provided at the ground floor level.

Ambulant cubicles will be required within male and female toilets at each level in addition to the unisex accessible toilet.

5.2 Unisex Accessible Toilets

Unisex accessible toilets are provided at each level of the building as per BCA requirement. The overall room dimensions and arrangement of fixtures is considered capable of compliance.

Compliance Summary:

Capable of compliance

All unisex accessible toilets within the building are left-handed facilities. A distribution of left and right-handed facilities are required for compliance.

Recommendations:

Access requirements for the accessible toilet facilities are as follows.

- 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.

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

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.

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

- c. Taps to have lever handles, sensor plates or similar controls. For lever taps, a minimum 50mm clearance to be provided to adjacent surfaces.
- 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.
- f. Accessible toilet to be identified using the International Symbol for Access. Pictograms / lettering to have a minimum 30% luminance contrast to the background colour. Signage is to comply with AS1428.1, Clause 8 and include information in tactile and Braille formats (as required by the BCA).
- g. 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.
- h. 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.
- i. 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.
- j. 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.



5.3 Unisex Accessible Shower Facility

A shower is provided within the accessible toilet compartment at the ground floor level and is considered capable of achieving compliance with the BCA.

Compliance Summary:

Capable of compliance

Recommendations:

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.

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

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.

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

5.4 Cubicles for People with an Ambulant Disability

Ambulant cubicles for male and female use will be required at each level of the building in addition to the unisex accessible sanitary facility.

Compliance Summary:

To be addressed during detailed design.

Recommendations:

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

The following should be addressed during preparation of detailed design stages to ensure compliance.

- a. Provide an ambulant cubicle within each bank of male and female toilets in compliance with AS1428.1, Clause 16.
- b. Minimum width of ambulant cubicles to be 900-920mm.
- c. Provide grabrails to ambulant cubicles to comply with AS1428.1, Clause 17 and Figure 53A.
- d. Doors to have a minimum opening width of 700mm and comply with AS1428.1, Figure 53B.
- e. Provide signage to the ambulant cubicles to comply with AS1428.1, Clause 16.4.



6 Vertical Circulation

Lifts provide the main access between levels of the building. Two lifts are provided within the development. A stair facilitates direct access between the ground floor and Level 1. Other stairs within the building are fire egress stairs.

6.1 Lifts

Two lifts are provided for access between levels. The size of the lifts appear to satisfy the requirements of AS1735.12.

Compliance Summary:

Capable of compliance

Recommendations:

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 as required by the BCA, Clause E3.6.
- b. Minimum internal dimensions of the lift car to be 1400mm wide x 1600mm deep BCA, Clause E3.6 – for a lift that travels over 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.

6.2 Stairs

Stairs are provided for direct access between the entry foyer and Leve 1. AS1428.1 has access requirements for all public access stairs and is applicable in this instance.

Compliance Summary:

Capable of compliance



Recommendations:

Access requirements for public access stairs are as follows and should be addressed during detailed design stages 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.

- 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 D3.8 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).

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.

6.3 Fire Egress Stairs

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

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.

Compliance Summary:

Capable of compliance



Recommendations:

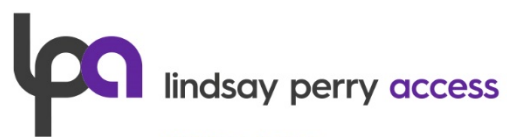
- a. Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.
- b. Stair nosings shall not project beyond the face of the riser.
- c. Handrails in a required exit serving an area required to be accessible, are to be designed and constructed to comply with AS 1428.1, Clause 12 (BCA D2.17).

We recommend the use of the staggered stair to maintain a constant height along the length of the handrail per AS1428.,1 (2009), Clause 12.

6.4 Fire Egress for Persons with a Disability

The Access Code for Buildings states that in the event of an emergency, provision must be made for people with vision impairment to locate the exit path (Clause H2.14).

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.



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