

Disability Access Report

City Administration Centre
263-283 High Street
MAITLAND NSW

For: Maitland City Council
Ref: LP_18158



Executive Summary

Development application documentation for the City Administration Building located at 263-283 High Street Maitland, 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 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		
4.1	Allotment Boundary to Entrance	Compliant
4.2	Carparking to Entrance	Compliant
4.3	Pathways	Capable of compliance
4.4	Accessible Carparking	Capable of compliance
4.5	Walkways	Capable of compliance
4.6	Stairs	Capable of compliance
4.7	Entrances	Capable of compliance
Interior		
5.1	Extent of Access Generally	Compliant
5.2	Affected Part	Compliant
5.3	Accessible Service Counters	Recommendation only
5.4	Hearing augmentation at Service Counters	To be addressed during detailed design
5.5	Hearing Augmentation Generally	To be addressed during detailed design
5.6	Circulation Areas	Compliant
5.7	Access to Upper Level	Compliant
5.8	Doorways Generally	Capable of compliance
5.9	Doorways in Vestibules	Compliant
5.10	Doorways to Ambulant Toilets	Compliant
5.11	Access to Stage	Compliant
5.12	Wheelchair Seating	Compliant
5.13	Exempt Areas	Compliant
5.14	Floor Finishes	To be addressed during detailed design
5.15	Carpet	To be addressed during detailed design
5.16	Controls	To be addressed during detailed design
5.17	Visual Indication to Glazing	To be addressed during detailed design
5.18	Tactile Indicators	To be addressed during detailed design
5.19	Signage	To be addressed during detailed design
5.20	Thresholds	To be addressed during detailed design
5.21	Slip Resistance	To be addressed during detailed design



Sanitary Facilities		
6.1	Distribution	Compliant
6.2	Accessible Toilets	Capable of compliance
6.3	Accessible Showers	Capable of compliance
6.4	Ambulant Toilet Cubicles	Capable of compliance
Vertical Circulation		
7.1	Lifts	Capable of compliance
7.2	Stairs	Capable of compliance
7.3	Fire Egress Stairs	Capable of 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
14 March 2019	draft DA Disability Access Report	0
26 March 2019	DA Disability Access Report	1



1. Project Background

This Access Report considers the City Administration Building located at 263-283 High Street Maitland, 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 project involves a major upgrade to the existing Council administration building to provide new work spaces and associated facilities. The building works are proposed over three main levels.

Documentation prepared by BVN Architecture has been reviewed as follows:

- AR-B-XX-00 A Floor Plan LV 00
- AR-B-XX-01 A Floor Plan LV 01
- AR-B-XX-02 A Floor Plan LV 02
- AR-B-XX-04 A Floor Plan Roof
- AR-B-XX-05 A Floor Plan LV B1
- AR-C-XX-00 A North and South Elevation
- AR-C-XX-01 A West and East Elevation
- AR-D-XX-00 A Cross Sections
- AR-D-XX-04 A Long Sections
- AR-R-XX-02 A GFA AReas
- AR-R-XX-04 A Shadow Diagrams - Summer
- AR-R-XX-05 A Shadow Diagrams - Winter
- AR-R-XX-07 A Finishes Board
- AR-U-XX-00 A Demolition Plan LV 00
- AR-U-XX-01 A Demolition Plan LV 01
- AR-U-XX-02 A Demolition Plan Roof
- AR-U-XX-03 A Demolition Plan LV B1

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. Council Requirements

Maitland Development Control Plan (December 2011) is applicable to this development. Part 3.1 – Accessible Living relates to access for people with disabilities. The objectives of the DCP are listed below:

- a) To increase community awareness of mobility handicaps affecting certain sections of the community and of the need for barrier-free design in the built environment.



- b) To ensure that new development is accessible and useable by all people in Maitland, including those people with disabilities, to facilitate their full and independent participation in community life.
- c) To introduce a quality assurance system for compliance with relevant Australian Standards for Access and Mobility (eg. as required by the Building Code of Australia) and thereby minimise the risk exposure of building users, Council and building owners.
- d) To provide an enhanced level of service for people with disability for those land uses which serve a public purpose.
- e) Where practical, to seek upgrading of existing buildings to the standards outlined in this Plan.
- f) To require an adequate supply of public parking facilities for use by people with disabilities.
- g) To provide intending developers with clear guidance as to legal requirements and Council policy for access and mobility

The design guidelines provided generally adopt a best-practice approach and have been considered in the access assessment of the proposed development.

The objectives of Maitland DCP with regard to access for people with disabilities are considered to have been met in the proposed design of the New Administration Building.

3. 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 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 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 buildings (Commercial Areas) requires access for people with disabilities to and within all areas normally used by the occupants.
- The **BCA 2016** for Class 9b (Town Hall area) 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. While AS1428.2 is not mandatory, the inclusion of its requirements such as accessible reception counters reduce the risk of a complaint made under the DDA. AS1428.2 is referenced by the Human Rights and Equal Opportunities Commission Advisory Notes for Access to Premises that accompanies the DDA.

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.

- **AS2890.6** applies to the carparking areas generally.
- **AS1735.12** contains requirements for passenger lifts for persons with a disability.



4. 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 High Street to the building entrance;
- from the carparking area to the building entrances.

4.1 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

A walkway offers access to the building entrance directly from the footpath along High Street.

4.2 Approach from Accessible Carparking

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

Compliance Summary:

Compliant

Accessible carparking is provided at the rear of the building within the main carparking areas. A walkway offers access to the building entrance from the carpark.

4.3 Pathways Generally

An accessible path of travel is required from the accessible carparking areas to the main entrance of each building / tenancy and from the allotment boundary to the main entrances. The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS1428.

Compliance Summary:

Capable of compliance

Recommendations:

For compliance with AS1428.1, the following access requirements apply and should be addressed during preparation of the construction certificate documentation 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.

4.4 Accessible Carparking

Where in excess of five carparking spaces are provided on the site, there is a requirement for the provision of accessible carparking.

Compliance Summary:

Compliant

A total of two hundred and two (202) carparking spaces are provided on the site, nine (9) of which are designated as accessible spaces. These are located in close proximity to the building entrance and configuration is on keeping with AS2890.6.

The number of accessible spaces satisfies BCA requirements for both Class 5 and Class 9b uses.

Recommendations:

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

- 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.



- 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, 1:33 (for outdoor spaces). This crossfall applies both parallel and perpendicular to the angle of parking.
- d. Designated accessible carparking is to be identified using the International Symbol for Access (ISA) –ground and vertical signage is required. Signage is to comply with AS1428.1.

4.5 Walkways

Walkways (three (3) off) are provided as a part of the accessible path of travel from both the High Street footpath and the carparking areas. AS1428.1 defines a walkway as having a gradient of 1:20, which is provided in this instance. The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS1428.

Compliance Summary:

Compliant configuration

Recommendations:

For compliance with AS1428.1, the following access requirements apply to the walkways and should be addressed during preparation of the construction certificate documentation to ensure compliance.

- a. The minimum unobstructed width of walkways is to be 1000mm (AS1428.1, Clause 6.3). A width of 1200mm is preferred for compliance with AS1428.2.
- b. Walkways are to be constructed with no lip or step at joints between abutting surfaces (a construction tolerance of 3mm is allowable, 5mm for bevelled edges -refer to Figure 6 of AS1428.1).
- c. The maximum allowable crossfall of a walkway is to be 1:40.
- d. Surface of the walkway to be slip-resistant.
- e. The ground abutting the sides of the walkway should follow the grade of the pathway and extend horizontally for 600mm. This is not required where there is a kerb or handrail provided (refer to AS1428.1 Clause 10.2).
- f. Maximum allowable gradient of the walkway is 1:20 and maximum length between landings to be 15m (for 1:20 gradient). Landings to be a minimum 1200mm in length (where there is no change in direction). For changes in direction of 180°, landings to be 1540mm in length – refer to AS1428.1(2009), Clause 10.8.



4.6 Stairs

Stairs are provided as a part of the pedestrian access from High Street to the building. 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 stairs are as follows and should be addressed during preparation of the construction certificate documentation to ensure compliance.

- a. Stairs to comply with AS1428.1(2009), Clause 11.2.
- b. Where the stair intersects the property boundary, the stair shall be set back a minimum of 900mm so that handrail extensions and tactile indicators do not protrude into the traverse path of travel.
- c. Stairs to have closed or opaque risers. Open risers cause confusion for persons with a vision impairment and may trigger conditions such as epilepsy due to light penetrating through the open riser.
- d. Provide handrails, with extensions, to both sides of the stair (AS1428.1 (2009), Clause 11.2 & 12). Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis.

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

- 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.

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.



4.7 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.

There are four (4) public entrances to the building as follows:

- Entrance to Administration Building from High Street – automatic sliding doors (public entrance);
- Entrance to Administration Building from carpark – automatic sliding doors (public entrance);
- Entrance to Administration Building from carpark – double swinging doors (secure entrance);
- Entrance to Townhall – existing (public entrance).

The use of automatic sliding doors is encouraged as it maximizes access for persons with a disability to the tenancy.

The Town Hall entrance is an existing condition that will remain unchanged as a part of the proposed development due to heritage restrictions. As this entrance is not accessible to people with non-ambulant disabilities, the design of the administration building entrance enables access to the town hall while securing commercial areas outside of business hours.

Compliance Summary:

Capable of compliance

Recommendations:

The following access requirements apply to the new entrances and should be addressed during preparation of the construction certificate 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.
- f. Where double door sets are provided, one door leaf is to be capable of being held in the closed position to provide door opening widths and circulation to comply with AS 1428.1.
- g. Provide directional signage, displaying the international symbol for access, at the existing Town Hall entrance to indicate the location of the accessible entrance via the walkway / new High Street entrance.
- 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.

5 Interior

The interior areas of the building are generally subject to accessibility requirements due to the building being of a public nature.

5.1 Extent of Access Generally – BCA

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

Compliance Summary:

Compliant

Lift access is provided to and within all areas of the building with the exception of some basement areas that are not required to be accessible due to their use.

5.2 Affected Part

As the proposed development is the modification of an existing building, only the “new work” and “affected part” is subject to current BCA requirements.

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

New work 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 principle 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:

Compliant

5.3 Accessible Counters (Best-practice recommendation)

A bar is provided as a part of the new building works. The provision of an accessible section of counter will benefit people using wheelchairs.

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 but is not required by the BCA.

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.

5.4 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 stages.

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.



5.5 Hearing Augmentation Generally

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:

Capable of compliance

Recommendations:

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

5.6 Circulation Areas

BCA (Clause D3.3) 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.

Compliance Summary:

Compliant

5.7 Access to Upper Level – 273 High Street

The proposed development has been designed around the existing 273 High Street building which will remain largely unchanged due to its heritage value. The existing building is over two (2) levels and access to the upper level is via stairs. Therefore, no access is available for persons with limited mobility. Given the floor area area of the upper level in the context of the overall floor area, we consider it reasonable not to provide lift access to this area.

Further, BCA Clause D3.3(f)(ii) states that a ramp or lift need not be provided to serve a storey or level of not more than 200sqm, if the building is not more than three storeys. In this instance, the upper level is less than 200sqm.

Compliance Summary:

Compliant – performance-based approach.



5.8 Doorways Generally

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

Compliance Summary:

Compliant circulation areas generally achieved.

Recommendations:

Access requirements for doorways within the accessible path of travel are as follows and should be addressed during preparation of the construction certificate documentation 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.

5.9 Doorways within Vestibules and Air-locks

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

Compliance Summary:

Compliant

5.10 Doorways within Vestibules and Air-locks to Ambulant Toilet Cubicles

AS1428 has requirements for circulation areas between doorways within vestibules / airlocks as part of the path of travel to ambulant toilet cubicles to enable independent access for people using a mobility aid. Figure 34(b) requires a minimum dimension of



900mm between doors. Where a doorway encroaches into the space, 900mm plus the door leaf width is required.

Compliance Summary:

Compliant

5.11 Access to Existing Stage – Main Hall

Level access to the stage is provided from the back-stage areas – a lift is provided. A lift within the back-stage areas is considered the optimum solution to providing access to the stage as it caters to audience members as well as performers.

Compliance Summary:

Compliant

5.12 Wheelchair Seating

The BCA Table D3.2 states not less than 3 wheelchair spaces for every 150 persons or part thereof (1 single space and a group of 2 spaces). Seating within the main hall is not fixed. This offers maximum flexibility in the provision of wheelchair seating locations.

Compliance Summary:

Compliant

5.13 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 areas; service area and the like.

5.14 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.

5.15 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.



5.16 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.

5.17 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.

5.18 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.

5.19 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.

5.20 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.

5.21 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.



6 Sanitary Facilities

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

6.1 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
- One unisex accessible adult change facility must be provided in an accessible part of a shopping centre having a design occupancy of not less than 3,500 people (calculated in the basis of floor area); a sporting venue that has a design occupancy of not less than 35,000 spectators or contains a swimming pool that has a perimeter greater than 70m; a museum or art gallery having a design occupancy of not less than 1,500 patrons; a theatre or the like having a design occupancy of not less than 1,500 patrons; a passenger use area of an airport terminal building providing public transport services.

Compliance Summary:

Compliant

Distribution of accessible sanitary facilities throughout the building is as follows. We note that there is no statutory requirement for an adult change facility within this building.

- **Level 00** – unisex accessible toilet (2 off); unisex accessible change rooms with toilet and shower (2 off); male and female ambulant cubicles.
- **Level 01** – unisex accessible toilet (2 off); male and female ambulant cubicles.



- **Level 02** – unisex accessible toilet (1 off); male and female ambulant cubicles.
- **Level B1** – unisex accessible change room with toilet and shower as part of end-of-trip facilities.

6.2 Unisex Accessible Toilets

Unisex accessible toilets are provided at each level of the proposed development in accordance with BCA requirements. General room sizes, arrangement of fixtures and provision of circulation areas is conducive to compliance.

Compliance Summary:

Capable of compliance

Recommendations:

Access requirements for the accessible toilet facilities are as follows and should be addressed during preparation of the construction certificate documentation to ensure compliance. For compliance with AS1428.1(2009), the minimum room dimensions of the accessible toilet are to be 1900x2300mm plus additional area for the handbasin. These are **CLEAR** dimensions. Provision for wall linings needs to be considered.

Where more than one accessible toilet is provided, a mirrored arrangement should be adopted to allow for the option of left- and right-handed use.

- 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.

6.3 Unisex Accessible Shower Facility

A shower is provided within two (2) accessible sanitary compartments and offer 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.



6.4 Cubicles for People with an Ambulant Disability

Ambulant cubicles are indicated within male and female toilets at each level in accordance with BCA requirements.

Compliance Summary:

Capable of compliance – adequate circulation areas provided

Recommendations:

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

The following should be addressed during preparation of the construction certificate documentation 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.

7 Vertical Circulation

Lifts and stairs provide the main access between levels of the building. Five (5) lifts are provided within the development. Stairs within the building are both publicly accessed and fire isolated egress stairs.

7.1 Lifts

Five (5) lifts are provided for access between levels of the building. The size of the lifts appears 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.

Minimum internal dimensions of the lift car to be 1100mm wide x 1400mm deep BCA, Clause E3.6 – for a lift that travels less than 12m.

- c. Clear opening of the lift door to be minimum 900mm.
- d. Provide a handrail complying with the provisions for a mandatory handrail in AS1735.12.
- e. All lift control buttons are to be in the accessible height range of 900-1100mm affl and have a minimum 30% luminance contrast to the background colour. This includes buttons within the lift car and at each public lift lobby. All buttons are to be provided with information in Braille and tactile formats.
- f. Auditory / voice cues are to be provided within the lift car to assist persons with a vision impairment.
- g. Series of door opening devices that will detect a 75mm diameter rod across the door opening between 50 mm and 1550mm above the floor level.
- h. Emergency hands-free communication, including a button that alerts a call centre of a problem, a light to signal that the call has been received by the call centre and a light indicating assistance is being dispatched.

7.2 Accessible Ramps

An accessible ramp is provided at Level 01 to facilitate access between levels. The overall configuration of the ramp will offer compliance.

Compliance Summary:

Capable of compliance

Recommendations:

Access requirements for the ramps are as follows and should be addressed during preparation of the construction certificate documentation to ensure compliance.

- a. Ramps to comply with AS1428.1, Clause 10.3.
- b. Maximum allowable gradient of the ramp is 1:14, minimum clear width to be 1000mm and maximum length between landings to be 9m (for 1:14 gradient).
- c. Where the ramp intersects with an internal corridor, the ramp shall be set back in accordance with AS1428.1 Figure 16 to allow adequate space for handrail extensions and tactile indicators.



- c. Provide handrails, with extensions, to both sides of the ramp to comply with AS1428.1, Clause 12. Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails are required on both sides of the ramp to cater for left and right handed disabilities.
- d. Where ramp is not enclosed, provide kerb rails in accordance with AS1428.1. The height of kerb rails is to be less than 65mm or greater than 150mm above the finished surface level. This is to ensure that the foot plate of a wheelchair cannot become lodged on the kerb rail.
- e. Provide tactile indicators at the top and bottom of the ramps 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.

Tactile indicators at the top and bottom of the ramps to be 600-800mm deep across the width of the ramp and set back 300mm from the edge of the ramp (refer AS1428.4.1, Figure A1).

7.3 Stairs

Stairs are provided in multiple locations to facilitate access between levels. 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 preparation of the construction certificate documentation 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.

7.4 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.

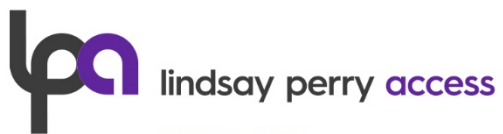
Compliance Summary:

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.



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